BROWN
Course Announcement 2017-2018
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.

Equal Opportunity and Nondiscrimination
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>
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<tr>
<td>April 14 - 25, 2017</td>
<td>Fri. - Tues. Summer registration closed for Fall registration (online via Banner for continuing students).</td>
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<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>
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<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>
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<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

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<td>Aug. 1, 2017</td>
<td>Tues. Last day for payment of charges.</td>
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<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>
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<tr>
<td>Sept. 6, 2017</td>
<td>Wed. Classes of the first semester begin. Web registration begins at 8:00 a.m.</td>
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<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 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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<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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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
<table>
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<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>
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<td><strong>Spring 2018</strong></td>
</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>
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<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>
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<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>
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<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>April 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>April 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 preregistration. Students in their first semester will need to procure their advising PIN from their advisor in order to register.</td>
</tr>
<tr>
<td>April 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>April 13, 2018</td>
<td>Fri.</td>
<td>Deadline for submission of proposals for undergraduate group study projects (GISPs) for Semester I.</td>
</tr>
<tr>
<td>April 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>April 24, 2018</td>
<td>Tues.</td>
<td>End of the pre-registration period.</td>
</tr>
<tr>
<td>April 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 8, 2018</td>
<td>Tues.</td>
<td>Classes end for courses not observing the Reading Period. Last day to drop a course (5:00 p.m. deadline) or to request an incomplete from an instructor. Last day for advisors to approve second or third concentrations in ASK for students in their penultimate semester(for most students this is 7th semester) who are declaring a second/third concentration(5:00 p.m. deadline). *Any declarations not 'advisor approved' and recorded in Banner by the Office of the Registrar by the 5:00 p.m. deadline will not be honored. Last day to initiate a Course Performance Report via ASK.</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 website at:
http://www.brown.edu/about/administration/registrar/course-enrollment

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.

Brown follows the Federal standard that defines a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than: (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for each semester, or the equivalent amount of work over a different amount of time (i.e. Summer/Winter Sessions); or (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours. Additionally, transfer credit must equate to the four semester hour standard except for three credit courses taken at the Rhode Island School of Design.

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 in 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 midsemester.

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, elect to be graded on a basis of either Satisfactory/No Credit or A, B, C, or 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 form 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 I, 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 a 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 administratively assigned 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:

### Semester I, 2017-2018

<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>
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<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>
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<tr>
<td>Dec. 17 Su</td>
<td>11</td>
<td>9</td>
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<tr>
<td>Dec. 18 M</td>
<td>3</td>
<td>13</td>
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<td>Dec. 19 T</td>
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<tr>
<td>Dec. 20 W</td>
<td>16</td>
<td>5</td>
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<td>Dec. 21 Th</td>
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</tbody>
</table>

### Semester II, 2017-2018

<table>
<thead>
<tr>
<th>Date</th>
<th>9 am Group</th>
<th>2 pm Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 9 W</td>
<td>14</td>
<td>10</td>
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<tr>
<td>May 10 Th</td>
<td>15</td>
<td>7</td>
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<tr>
<td>May 11 F</td>
<td>12</td>
<td>4</td>
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<tr>
<td>May 12 Sat</td>
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<td>13</td>
</tr>
<tr>
<td>May 18 F</td>
<td>8</td>
<td>18</td>
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</table>

**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.
- 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, sexuality, 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 DPLL courses may be viewed in Courses@Brown by choosing “Diverse Perspectives in LL” in the Curricular Programs field.

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

Sophomore Seminars

Sophomore seminars bring together ideas, perspectives, and approaches that are not normally seen side by side in a given course or program. Embracing a range of intellectual perspectives, many of the seminars focus specifically on issues of social justice, identity, and difference. Limited to twenty students each, the seminars help students develop the skills, knowledge, and values they need to progress toward more advanced learning in a discipline or field.

A complete list of each semester’s SOPH seminars may be viewed in Courses@Brown by choosing “Sophomore Seminar” in the Curricular Programs field.

Writing-Designated Courses

Brown students are expected to work on writing in their general studies and in the concentration. Students may begin to fulfill this expectation by taking at least one course that carries the WRIT designation. WRIT courses are offered across the curriculum and help students develop the ability to write well in styles appropriate to different academic disciplines.

A complete list of each semester’s WRIT courses may be viewed in Courses@Brown by choosing “Writing-Designated Courses” in the Curricular Programs field.

Diverse Perspectives in Liberal Learning

Fall 2017

Africana Studies
AFRI 0090 S01 16963 An Intro to Africana Studies Keisha-Khan Y. Perry
AFRI 0210 S01 16406 Afro Latin Americans Anani Dzidzienyo
AFRI 0670 S01 15298 Global Black Radicalism Brian W. Meeks
AFRI 1050 S01 15048 Rhythm and Resistance Ryan A Mann-Hamilton
AFRI 1080X S01 17210 African Development Patricia C Agupusi
AFRI 1060Z S01 17240 Race, Sexuality, Mental Disab Nic Ramos
AFRI 1110 S01 15299 Voices Beneath the Veil Elmo Terry-Morgan
AFRI 1210 S01 16407 Afro-Brazilian + Brazilian Polity Anani Dzidzienyo

American Studies
AMST 01910 S01 17285 Revolutimg Bodies TBD
AMST 1600C S01 16145 Anti-Trafficking Savior Complex Elena Shih
AMST 1611A S01 15808 20thC US Immigrant Ethnic Lit Richard Alan Meckel
AMST 1700K S01 16720 Race in the Americas Kevin A. Escudero
AMST 1905X S01 16107 Public Memory Beverly Haviland

Anthropology
ANTH 0700 S01 17553 Intro. to Modern South Asia Brian A. Horton
ANTH 0800 S01 16643 Intro to Linguistic Anthro Lynnette Arnold
ANTH 1240 S01 15873 Religion and Culture Bhrigupati Singh
ANTH 1253 S01 16644 The Visual in Anthropology Lina M. Fruzzetti

Biology
BIOL 0100P S01 16190 Pride/Prej Dev of Sci Theories Stephen L. Helfand

Classes
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

Contemplative Studies
COST 0030 S01 17490 Sound, Song and Salvation in S Srinivas S Reddy

East Asian Studies
EAST 0600 S01 15655 Lit and Soc Ineq in Late China Kaijun Chen
EAST 1280 S01 17338 Intro to Japanese Cinema 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 Louis Puttermann

Education
EDUC 0100 S01 15114 Brown v. Board of Education Tracy L. Steffes
EDUC 1035 S01 15594 Decolonizing African Education Rachel A. Kantrowitz
EDUC 1360 S01 17118 Empire, Childhood, and Youth Rachel A. Kantrowitz
EDUC 1890 S01 17063 Family Engagement in Education Yoko Yamamoto

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

Ethnic Studies
ETHN 0170A S01 17128 Representations of Native PPLS Adrienne J. Keene
ETHN 1000 S01 16108 Intro to Americ/oEthnic Studies Elizabeth M. Hoover
ETHN 1650S S01 17066 Asian Americans and the Racial Robert George Lee
ETHN 1750B S01 16110 Eating Local in Indian Country Elizabeth M. Hoover
ETHN 1750D S01 16714 Transpacific Asian American St Evelyn Hu-Dehart

Gender and Sexuality Studies
GNSS 1721 S01 15253 Cinema's Bodies Gertrud M. Koch
GNSS 1961G S01 17488 Gender in Middle Eastern Film Thomas L. Thompson
GNSS 1961H S01 17487 Human Rights and Literature Anjuli I Gunarathe

Hispanic Studies
HISP 0730 S01 15803 Latin Am in Its Lit + Culture Felipe I. Martinez-Pinzone

History
HIST 0555B S01 15292 Robber Barons Lukas B. Rieppel
HIST 0557C S01 17073 Narratives of Slavery Emily A Owens
HIST 0637A S01 15285 History of Jews in Brazil James N. Green
HIST 1506 S01 15288 Making America Modern Lukas B. Rieppel
HIST 1553 S02 17373 Empires in America to 1890 Sandra K. Haley
HIST 1962D S01 16540 Social Lives of Dead Bodies Rebecca A. Nedostup

Judaic Studies
JUDS 0603 S01 16545 Race, Religion, + the Secular Paul E. Nahme
JUDS 1713 S01 15143 Intro to Yiddish Cult + Lang Rachel Rojanski

Literary Arts
LITR 1151L S01 17196 Recent Poetry in Translation Forrest Gander

Middle East Studies
MES 1200 S01 16425 Ways of SeeingArab World in G Hanan Toukan
MES 1300 S01 16478 Intellectual Change:OttomnTurk Mettern C Toksoz
MES 1985 S01 17227 Shahs, Clerics, Poets.Cult.Rep Amir Moosavi

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 1203U S01 17471 East Asian Cinemas Thor Shen

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Portuguese and Brazilian Studies
POBS 0620 S01 24659 Map Portugal-Speak Cltr:Prtugl Leonor Simas-Almeida

Public Health
PHP 1400 S01 26020 HIV/AIDS in Africa Medeva Ghee
PHP 1500 S01 25987 Global Health Nutrition Stephen T. McGarvey
PHP 1600 S01 25498 Obesity in the 21st Century Akiiah Keita
PHP 2360 S01 26017 Public Health Interventions Matthew J. Mimiga
PHP 2380 S01 26019 Health Communication Kate B. Carey

Religious Studies
RELS 0015 S01 24334 Sacred Stories Susan Ashbrook Harvey
RELS 0056 S01 24335 Spiritual But Not Religious Daniel Vaca
RELS 1380A S01 24341 Money, Media, and Religion Daniel Vaca
RELS 1530D S01 24342 Medieval Islamic Sectarianism Nancy Khalek

Theatre Arts and Performance Studies
TAPS 1281Z S01 24923 ASaP: Theory to Practice Julie A. Strandberg

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

First Year Seminars
Fall 2017
American Studies
AMST 0150E S01 16143 Skill Steven D. Lubar

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

Archaeology and Ancient World
ARCH 0270 S01 16462 Troy: Archaeology of an Epic Eva M Mol

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

Biology
BIOL 0150A S01 16188 Tech/Anlysys DNA-based Biotech Jody Hall
BIOL 0190F S01 16288 Darwinian Medicine Marc Tatar
BIOL 0190P S01 16190 Pride/Prej Dev of Sci Theories Stephen L. Helfand
BIOL 0190R S01 15658 Phage Hunters, Part I Sarah E. Taylor
BIOL 0190U S01 16191 The Lives of Plants Peter Heywood

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

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

Comparative Literature
COLT 0510F S01 15722 Fidel Castro and Che Guevara Esther K. Whitfield
COLT 0610D S01 15639 Rites of Passage Arnold Louis Weinstein

Education
EDUC 0410G S01 17116 The Afterschool Hours Hilary L. Levey Friedman

English
ENGL 0150C S01 15574 The Medieval King Arthur Elizabeth Johnson Bryan
ENGL 0150Q S01 15575 Realism and Modernism Paul B. Armstrong

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

French Studies
FREN 0720D S01 17306 Contes et identités Lewis C. Seifert

Geological Sciences
GEOL 0160E S01 16956 Volcanos:Wndws into Deep Earth Alberto Saal

German Studies
GRMN 0750F S01 16686 Historical Crime Fiction Thomas W. Kniesche

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. Rieppel
HIST 0556A S01 15273 Sport in American History Howard P. Chudacoff
HIST 0557C S01 17073 Narratives of Slavery Emily A Owens
HIST 0580M S01 15283 Age of Revolutions, 1760-1824 Jeremy R. Mumford

Humanities
HUMAN 0900B S02 17086 Hist of Inauthentic Felipe A. Rojas Silva

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

Literary Arts
LITR 0100A S01 16669 Introduction to Fiction Gbolahan Adeola
LITR 0100B S01 16675 Introduction to Fiction Esther Inhae Yi
LITR 0100B S01 16677 Introduction to Poetry TBD
LITR 0100B S02 17107 Introduction to Poetry TBD
LITR 0510B S01 16098 Into the Machine Joanna E. Howard
LITR 0710 S01 16095 Writers on Writing Seminar Leigh Cole Swensen

Music
MUSC 0021B S01 16559 Reading Jazz Matthew Richards McGarrell
MUSC 0021J S01 16535 Stephen Sondheim and the Ameri Dana A. Gooley

Political Science
POLS 0820H S01 17236 Race and Visions of Justice Melvin L Rogers
POLS 0820T S01 15516 Women's Welfare in Global Pers Linda J. Cook
POLS 0820U S01 15466 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 0050 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
Africana Studies
AFRI 0550 S01 25859 African American Health Activi TBD

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

Biology
BIOL 0150D S01 25908 Technq in Regenerative Medicine Toni-Marie Achilli
BIOL 0190S S01 24548 Phage Hunters, Part II Sarah E. Taylor

Chemistry
CHEM 0080A S01 25900 First Year Seminar- Energy Peter M. Weber

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

Czech
CZCH 0320A S01 24133 Czech Animation Masako Ueda Fidler

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

Education
EDUC 0400 S01 24086 Amer College/University-1960’s Luther Spoehr
EDUC 0410A S01 24096 New Faces, New Challenges Andrea Flores
EDUC 0410B S01 24100 Controversies in US Ed Policy John H. Tyler
EDUC 0410F S01 24120 The Mind, Brain, and Education David E Rangel

Engineering
ENGN 0120A S01 25164 Crssng Consumr Chasm by Desgn Richard D. Fleeter
ENGN 0120B S01 25165 Crssng Spce Chsm Thr Engn Dsgn Richard D. Fleeter

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

Gender and Sexuality Studies
GNSS 0090C S01 25929 Reproductive Health TBD

Hispanic Studies
HISP 0750G S01 24840 Wildeyed Stories Mercedes Vaquero

History
HIST 0556A S01 24233 Sport in American History Howard P. Chudacoff

Literary Arts
LITR 0100A S01 25339 Introduction to Fiction TBD
LITR 0100B S02 25834 Introduction to Fiction TBD
LITR 0100B S01 25340 Introduction to Poetry TBD
LITR 0710 S01 24849 Writers on Writing Seminar TBD

Music
MUSC 0066 S01 25861 The Guitar Christopher Joshua Tucker

Public Health
PHP 0030 S01 25999 Health of Hispaniola Timothy M. Empkie

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

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

Ethnic Studies
ETHN 0170A S01 17128 Representations of Native PPLS Adrienne J. Keene

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

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

Writing-Designated Courses

Fall 2017
Africana Studies
AFRI 0090 S01 16963 An Intro to Africana Studies Keisha-Khan Y. Perry
AFRI 1010C S01 17419 Race, Gender, Ethics and Envr Vanessa Fabien
AFRI 1110 S01 15299 Voices Beneath the Veil Elmo Terry-Morgan

American Studies
AMST 0150E S01 16143 Skill Steven D. Lubar
AMST 0191O S01 17285 Revolting Bodies TBD
AMST 1905X S01 16107 Public Memory Beverly Haviland

Archaeology and Ancient World
ARCH 1150 S01 16863 Ancient Cities + Urban Space Margaret Marshall Andrews

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

Classical Studies
CLAS 0150 S01 15689 Ancient Philosophy Iain Kenneth Laidley

Literary Arts
LITR 0100A S01 16191 The Lives of Plants Peter Heywood
LITR 0430 S01 16366 Evolution of Plant Diversity Fred V Jackson
LITR 0940A S01 16204 Viral Epidemics Walter J. Atwood

Business, Entrepreneurship and Organizations
BEO 1930A S01 15998 BEO Capstone I Lisa DCarlo
BEO 1930B S01 15999 BEO Capstone I Steven F. Petteruti
BEO 1930C S01 16000 BEO Capstone I Thanh Chi Nguyen

Chemistry
CHEM 1560N S01 15683 Organometallic Chemistry Jerome R Robinson

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<td>S01 16908 Congressional Investigations Jeffrey S Robbins</td>
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Course Descriptions

Africana Studies

AFRI 0090. An Introduction to Africana Studies.
This course introduces students to the vibrant and contested field of Africana Studies by critically exploring and analyzing the links and disjunctures in the cultural, political, and intellectual practices and experiences of people of African descent throughout the African diaspora. Beginning with a critical overview of the history, theoretical orientations, and multiple methodological strategies of the discipline, the course is divided into three thematic units that examine intellectual, political, and movements; identity construction and formation; and literary, cultural, and aesthetic theories and practices in the African diaspora. DPLL WRIT
Fall AFR0090 S01 16963 TTh 9:00-10:20(08) (K. Perry)

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 AFRI0210 S01 16406 TTh 2:30-3:50(03) (A. Dzidzienyo)

AFRI 0550. African American Health Activism from Emancipation to AIDS.
This historical survey course examines African American activism and social movements from Emancipation to the contemporary period through the lens of African American access to health resources. By paying close attention to how social and cultural aspects of medicine impact access and quality of care by race, gender, and sexuality, the course examines how segregation, poverty, incarceration, and policing shaped activism and healthcare. The course develops a sense of how African American activists crafted responses to different historical crises including Reconstruction, Jim Crow, Civil Rights, and the War on Drugs by the demands they made for specific resources. FY S WRIT DPLL
Spring AFR0550 S01 25859 TTh 2:30-3:50(11) "To Be Arranged"

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)

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, Corbett, Gibson, Holmes, West, and Pomo Afro Homos. Some evening screenings of videotapes. Enrollment limited to 40. WRIT DPLL
Spring AFR0990 S01 24259 TTh 1:00-2:20(10) (E. Terry-Morgan)

AFRI 1010C. Race, Gender, Ethics and Environmental Justice.
African Americans, Gender, Ethics and Environmental Justice examines the role of African Americans in the larger environmental history conversation. It utilizes a gendered lens to investigate how African American interpreted their natural surroundings and contributed to the development of 20th century American environmental consciousness. This course is reading and writing intensive. WRIT
Fall AFRI1010C S01 17419 F 3:00-5:30(11) (V. Fabien)

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-War II manifestations, is our starting point. Enrollment limited to 40. DPLL
Spring AFRI1020C 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
Spring AFRI1050A 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
Spring AFRI1050D S01 24261 Th 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
Spring AFRI1050E S01 24262 Th 4:00-6:30(17) (E. Terry-Morgan)

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 AFRI1050V 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
Spring AFRI1060E S01 25096 W 3:00-5:30(14) (A. Dzidzienyo)

AFRI 1060X. African Development.
Course takes an interdisciplinary approach to introduce contemporary development issues in Africa. Drawing on literature from political sciences, economics, sociology and history, it explores the challenges of development in the continent since independence, as well as investigates the influences of governance, institutions, conflicts and external forces in Africa’s development trajectories. This is an applied course that would utilize both theoretical and policy analytical approaches to examine the political and socioeconomic dynamism in contemporary Africa. This course is guided by questions, such as: Why have most African countries remained underdeveloped, poor and susceptible to conflicts (many of which seem intractable)? DPLL
Fall AFRI1060X S01 17210 TTh 6:40-8:00PM(05) (P. Agupusi)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
AFRI 1060Z. Race, Sexuality, and Mental Disability History.
This course investigates the fraught entanglement of mental disability with race and homosexuality beginning with late 19th Century ideas of scientific racism and the invention of the homosexual body in African American communities. By tracking changes in Psychiatry and Psychology through the 1960s and 1970s, the course examines the impact of the Civil Rights and Gay Rights movements on sustaining contemporary mental health diagnosis of "gender dysphoria" associated with Trans people. The course will further examine several approaches to queer, trans, and gay history from the fields of color critique, black feminism, and disability studies. Enrollment limit is 20. DPLL
Fall AFRI1060Z S01 17240 M 3:00-5:30(15) (N. Ramos)

AFRI 1110. Voices Beneath the Veil.
VBV is an interdisciplinary exploration of African-American history and cultures through the analyses of Black authored plays from 1858 to the present. The course focuses on the development of a thesis paper, which includes an incremental re-writing process. WRIT DPLL
Fall AFRI1110 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 poeticians, 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 AFRI1150 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 Africana 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 AFRI1210 S01 16407 W 3:00-5:30(17) (A. Dzidzienyo)

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 concentrations; others by instructor permission only. Enrollment limited to 25. DPLL
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.

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(13) (P. Henry)

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.
Spr AFRI2101 S01 25624 Th 10:00-12:30(09) (K. Perry)

AFRI 2450. Exchange Scholar Program.
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 interwoven 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"
Spr 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.

AFRI 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 AFRI2990 S01 14939 Arranged "To Be Arranged"
Spr 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

History
HIST 0557C Narratives of Slavery

Religious Studies
RELS 0075 Blues People: Topics in African American Religion and Culture
RELS 2600L Afro-Theism

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 1710J Modern African Literature

History
HIST 1515 American Slavery
HIST 1972F Consent: Race, Sex and the Law
American Studies

**American Studies**

**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 AMST0150ES01 16143 TTh 10:30-11:50(13) (S. Lubard)**

**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.

**WRIT FYS**

**Spr AMST0150FS01 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.

**WRIT DPLL**

**Spr AMST0191CS01 25788 TTh 9:00-10:20(01) (J. Corteza)**

**AMST 0191E. Objects as Texts: Materializing Race, Gender, and Sexuality.**

What is the relationship between objects and identity? This course analyzes how material objects reflect and produce representations of identity, which map onto the body. Alongside a survey of cultural studies, feminist theory, and critical race studies scholarship, we will use specific objects—including, sugar, milk, vibrators, and Spanx—as case studies to critically consider how material culture informs and signals identity. With an emphasis on race, gender, and sexuality, we will read objects as texts and explore how materiality shapes politics, performance, and power.

**WRIT DPLL**

**Spr AMST0191ES01 25829 MW 8:30-9:50(02) (M. Goddard)**

**AMST 0191O. Revolting Bodies: Aesthetics, Representation, and Popular Culture.**

Our understanding of ourselves and others are formed by visual images and bodily feelings that are social in origin. They make us feel (un)comfortable, sublime, ridiculous, grotesque. In this course we will examine how the materiality of the body grounds our metaphors about identity and subject formation. This course moves between cultural studies, queer theory, disability studies, science fiction, drama and film asking how representations structure they way we "know" and "see" bodies. Ultimately we will explore how revolting bodies--bodies that disgust, repulse, signal their difference--can become bodies in revolt--bodies that resist and imagine new possibilities.

**WRIT DPLL**

**Fall AMST0191CS01 17265 MW 8:30-9:50(01) "To Be Arranged"**

**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 complexities 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 AMST1600CS01 16145 MWF 12:00-12:50(12) (E. Shih)**

**AMST 1611A. Making America: Twentieth-Century U.S. Immigrant/ Ethnic Literature.**

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.

**Fall AMST1611AS01 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 D. W. Griffith will be a key text in dialogue with African-American director Oscar Micheaux's Within Our Gates (1920).

**Spr AMST1611OC01 26388 MWF 10:00-10:50(14) (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 AMST1611ZS01 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 nationhood.

**DPLL**

**Fall AMST1700KSO1 16720 Th 4:00-6:30(04) (E. 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 AMST1700LS01 25122 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

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.

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.

Students explore material culture, its impact upon the environment in the US prior to Industrial Revolution and examine the relationship of this earlier production to current issues of pollution and climate change. In the 18-19th centuries, houses, furniture, whale products were staples of American craft and ingenuity. This material culture tells the story of how gathering raw materials and converting them into usable products came at a severe cost to watersheds, forests, species, humans. These examples show that the seemingly insatiable human urge to control/transform resources into items for consumption leads to serious consequences for the earth’s climate and inhabitants.

AMST 1905G. Literature and the Problem of Poverty (ENGL 1710K).
Interested students must register for ENGL 1710K.

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

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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 2666. Repair: Museums, Material, and Metaphor.
The study of repair as material process and as metaphor offers an opportunity to consider the cultural values of progress, authenticity, sustainability, the nature of skill, and more. This course, part of the planning for an exhibition and programs at the RISD Museum, will explore these issues using a material culture and public humanities framework, and consider how museums treat repair as both material and metaphorical practice. Students projects will include exhibition and program planning as well as writing on historical and contemporary art and technology, politics, philosophy, and practice.
Available only to students in the Public Humanities M.A. program.
Fall AMST2666 S01 25910 W 2:00-4:30 (S. Lubar)

AMST 2670. Practicum in Public Humanities.
Practicums in public humanities provide practical, hands-on training that is essential for careers in museums, historic preservation, and cultural agencies. Students will work with faculty to find appropriate placements and negotiate a semester's or summer work, in general a specific project. Available only to students in the Public Humanities M.A. program.
Fall AMST2670 S01 17451 Arranged (R. Potvin)
Spr AMST2670 S01 25955 Arranged (R. Potvin)

AMST 2680. Practicum in Public Humanities.
Practicums in public humanities provide practical, hands-on training that is essential for careers in museums, historic preservation, and cultural agencies. Students will work with faculty to find appropriate placements and negotiate a semester's or summer work, in general a specific project. Available only to students in the Public Humanities M.A. program.
Fall AMST2680 S01 17453 Arranged (R. Potvin)
Spr AMST2680 S01 25956 Arranged (R. Potvin)

AMST 2690. Management of Cultural Institutions.
This course explores public humanities institutions as an organizational system interacting with broader community systems. Students gain an understanding of the managerial, governance and financial structures of public humanities organizations and how those structures relate to mission, programming and audience. The course is designed to help those who work on the program side of public humanities and cultural non-profits(as educators, librarians, curators, interpreters, exhibit designers, public programming coordinators, and/or grant makers) engage more strategically with planning, organizational behavior, revenue generation, finance, marketing, and governance.
Spr AMST2690 S01 25856 T 4:00-6:30(16) "To Be Arranged"

AMST 2692. Digital Public Humanities.
What is “digital humanities” and how does it impact and intersect with the field of public humanities? Digital humanities work involves new approaches to reading, writing, research, publication, and curation: digital tools help us examine digital and non-digital material in innovative ways, and digital modes of communication help us reach new and wider ranges of audiences. This course provides students with the opportunity to create digital projects and utilize digital tools to further their academic and professional interests.
Fall AMST2692 S01 17297 Arranged (J. McGrath)

AMST 2694. Decolonizing Public Humanities: Intersectional Approaches to Curatorial Work + Community Organizing.
This course will decenter experiences and cultural expectations attendant to whiteness, cis-maleness, able-bodiedness, heterosexuality, and middle/upper-classness in the public humanities, and thereby explore the contemporary problems and possibilities of intersectional approaches in the field. What do contemporary paradigms of “diversity,” “public engagement,” and “cultural organizing” have to teach us about effective and ethical public humanities approaches? Do different, multiply marginalized communities of affinity practice entirely different public humanities? How are cultural interventions changing to accommodate the demands of an increasingly segmented public sphere?
Fall AMST2694 S01 17298 T 4:00-6:30(09) (M. Salkind)

AMST 2698. Critical Perspectives in Informal Learning.
This course explores informal learning in multiple settings including art museums, historic houses, children's museums, and science centers. Students will consider definitions of, and goals for informal learning. Together we will investigate questions regarding the possibilities and challenges of informal learning and examine philosophical and practical questions such as: what are our goals -- programmatic and pedagogic -- as educators? How do we meet the needs of diverse audiences? How do we develop inclusive audience practices? This course will give students a firm grounding in the history and philosophy of informal learning as well as explore contemporary issues in the field.
Fall AMST2698 S01 17465 M 3:00-5:30(15) "To Be Arranged"

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

AMST 2950. Independent Reading and Research in Public Humanities.
For MA in Public Humanities Students who wish to do independent reading and research.

AMST 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 AMST2990 S01 14941 Arranged "To Be Arranged"
Spr AMST2990 S01 23975 Arranged "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ETHN 1070A. History and Resistance in Representations of Native Peoples.
Throughout history, Native peoples have been portrayed through a stock set of stereotypes such as savage warriors, Indian princesses, or mystical shamans. These images surround us in advertising, news media, Hollywood, sports mascots, and Halloween costumes. This course will examine the foundations of these representations and their connections to colonization, with a focus on contemporary and ongoing examples, from Johnny Depp’s Tonto, Urban Outfitters’ “Navajo” products, to JK Rowling’s “History of Magic in North America,” with a focus on the ways Native peoples are taking back and reshaping Native representations through activism, social media, art, design, film, and more. DPLL SOPH
Fall ETHN1070AS01 17128 M 3:00-5:30(15) (A. Keene)

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 those experiences, as well as representations of the racial and ethnic stratification in the U.S. imagination. DPLL
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 ETHN1200BS02 25721 W 3:00-5:30(14) (A. Keene)

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 been presented on. DPLL
Spr ETHN1200E S01 24914 TTh 10:30-11:50(09) (R. Rodriguez)

ETHN 1650B. Asian Americans and the Racial State: Exclusion and Internment.
This seminar focuses on Chinese Exclusion (1875-1943) and Japanese Internment (1942-1945) two episodes that have had implications that extend far beyond Asian America. DPLL
Fall ETHN1650B S01 17066 W 3:00-5:30(17) (R. Lee)

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 4:00-5:30(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 ETHN1750C S01 16714 M 3:00-5:30(15) (E. Hu-Dehart)

ETHN 1750F. Asian Americans and the Struggle for Social Justice.
In 1868, in the largest strike that America had ever seen, ten thousand Chinese workers struck Central Pacific Railroad. One hundred years later, Asian Americans, now stereotyped as the “model minority,” are rendered invisible in current struggles for social justice. Yet as railroad workers, laundymen, farmworkers, draft resisters, sewing women and nurses, Asian Americans have left us a rich legacy of legal, social and political activism. Particular attention will be paid to solidarity across racial, gender, and national boundaries. DPLL
Spr ETHN1750F S01 25787 TTh 10:30-11:50(09) (R. Lee)

ETHN 1900E. Senior Seminar in Ethnic Studies.
No description available.
Spr ETHN1900E S01 24641 M 3:00-5:30(13) (E. Shih)

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 ANTH0066D S01 25378 M 4:00-5:30(08) (P. Rubertone)

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 own. No prerequisites. WRIT DPLL
Spr 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 with an account of the principal theoretical positions that have 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 materialized representations from mythical worlds. DPLL Spr ANTH0130 S01 24887 TTh 10:30-11:50(09) (W. Simmons)

ANTH 0310. Human Evolution.
Examination of theory and evidence on human evolution in the past, present and future. Topics include evolution and adaptation, biocultural adaptation, fossil evidence, behavioral evolution in primates, human genetic variation and contemporary human biological variation. Spr ANTH0310 S01 25688 MWF 9:00-9:50(02) (A. de Carteret)

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. Fall ANTH0500 S01 15872 MWF 10:00-10:50(14) (A. de Carteret)

ANTH 0700. Introduction to Modern South Asia.
Students will be introduced to the social, political, cultural, and religious lives of people from the region known as ‘South Asia’. Course lectures and materials will draw from a broad range of material covering Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. This course is designed to get students to think broadly about themes related to social inclusion, state formation, discrimination, ethnic and social conflict, identity politics, and a host of other issues that have defined the region. This course will help students think about how themes, conversations, and course material can connect to their own research interests. DPLL Fall ANTH0700 S01 17553 T 4:00-6:30(09) (B. Horton)

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, courthouses, medical settings, and political campaigns. DPLL Fall ANTH0800 S01 16643 MWF 2:00-2:50(07) (L. Arnold)

This engaged scholars course uses anthropological and historical methods to explore the contributions of young people in the imagining and crafting of a sustainable urban future. Drawing inspiration from The Negro Motorists Green Book (Green, 1936), a safe travel guide for African Americans in the Jim Crow era, the course pairs students at Brown with youth at a local after-school arts program. Through drawing, painting, writing, mapmaking, and other techniques for creative social inquiry, we develop and share an updated “guide” for urban movement that reflects on the conditions and possibilities of the surrounding neighborhood and city.
Spr ANTH0820 S01 25964 W 3:00-5:30(13) (R. Carter)
Spr ANTH0820 S01 25964 M 3:00-5:30(13) (R. Carter)

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 Spr ANTH1030 S01 25326 TTh 10:30-11:50(09) (S. Houston)

ANTH 1111. Anthropology of China.
This course introduces students to contemporary Chinese culture and society, with 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 cybertext. WRIT Spr ANTH1111 S01 24813 TTh 2:30-3:50(11) (K. Mason)

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 counterinsurgency wars of the 1980s, and the war in Iraq. Spr ANTH1232 S01 24809 TTh 2:30-3:50(11) (C. Lutz)

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 Fall ANTH1240 S01 15873 TTh 10:30-11:50(13) (S. Houston)

ANTH 1253. The Visible in Anthropology: Documentary Films and Society.
This lecture course entails an introduction of the history of anthropology of exclusive authors to critically juxtapose their work with current theoretical and methodological approaches in the discipline. Readings and lectures will draw primarily upon recent ethnographic 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 Fall ANTH1253 S01 16644 TTh 10:30-11:50(13) (K. Mason)

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 Fall ANTH1300 S01 15875 M 3:00-5:30(15) (L. Glasser)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ANTH 1301. Anthropology of Homelessness.
Homelessness emerged as a public concern in the United States and in other industrialized countries in the late 1970s as people began encountering people living on the streets, a way of life which had formerly been confined to the skid rows of large cities. In this course, through readings, readings, discussion, and hands on experiences with homeless populations, we will uncover the causes, conditions, and responses to homelessness. Each student will spend at least two hours per week in a local homeless-serving agency in order to gain face to face experiences. The field placements will be facilitated by the professor.

ANTH 1301T. Introduction to Anthropology.
Enrollment limited to 20.

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 emotions? 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 1720. The Human Skeleton.
More than simply a tissue within our bodies, the human skeleton is a gateway into narratives of the past—from the evolution of our species to the biography of individual past lives. Through lecture and hands-on laboratory, students will learn the complete anatomy of the human skeleton, with an emphasis on the human skeleton in functional and evolutionary perspective. We’ll also explore forensic and bioarchaeological approaches to the skeleton. By the course conclusion, students will be able to conduct basic skeletal analysis and will be prepared for more advanced studies of the skeleton from medical, forensic, archaeological, and evolutionary perspectives.

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.

ANTH 1901. Anthropology and/of the Museum.
This course provides an introduction to museums from an anthropological perspective. Topics include politics of representation and the construction of the “Other”; objects, identity, and meaning; collecting and cultural property; and collaboration, community engagement, and indigenous self-representation. Assignments involve work with the Haffenreffer Museum of Anthropology’s exhibitions and collections. The course focuses on museums dedicated to natural and cultural history, but establishes theoretical and practical grounding for thinking about and working in other disciplines and other kinds of display institutions. It is suitable for both undergraduate and graduate students. There are no prerequisites; but familiarity with anthropology is presumed.

ANTH 1902. Writing Anthropological Research.
Examines the methodological problems associated with field research on public health. 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.

ANTH 1901D. 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.

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

ANTH 1910D. Individual Research Project.
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.


The body is inescapable: humans live with it and through it, sending messages and instating identity. The body remains, and will remain, our principal means of cultural expression. As its guiding proposition, this seminar affirms that body arts have a history and social setting, whether of gesture, clothing, fashion, tattooing, make-up, hair-styles, and a set of theories and dispositions needing close review and appraisal. These come from varied sources, including anthropology, art history, cultural studies, literature history or archaeology.

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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ANTH 2045. Proposal Writing Workshop for Anthropological Fieldwork.
This course is designed for third-year graduate students in any subfield of anthropology or closely related fields who are writing grant proposals for dissertation research. Student grant proposals will be pre-circulated and workshop. Students will gain familiarity with the format for writing successful proposals, with the strategies needed to operationalize them, and with the everyday academic labor of both offering and responding to substantive feedback.
Fall ANTH2045 S01 17018 M 9:00-11:30(01) (J. Leinaweaver)

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 workshop/writing.
Fall ANTH2060 S01 16689 Arranged (D. Smith)
Spr ANTH2060 S01 25330 Arranged (D. Smith)

ANTH 2210. Analysis of Social Structure.
This course will discuss the analysis of kinship and the construction of the person cross culturally.
Fall ANTH2210 S01 17272 W 9:00-11:30(01) (J. Leinaweaver)

ANTH 2225. Life Itself.
Have our conceptions of life been too anthropocentric, as many anthropologists and critical theorists have recently argued? What would it mean to develop a wider “vitalist” conception of the human? Would the category of humanism itself be dissolved? How do these new theoretical problems relate to longstanding issues within anthropology and philosophy? In this course we explore intellectual genealogies for these local and global dilemmas around the conception of life itself, through recent ethnographies and classic texts of social theory, and continental philosophy. Authors include Foucault, Deleuze, Nietzsche, Agamben, Jane Bennett, and others read alongside recent ethnographic work.
Fall ANTH2225 S01 17012 T 4:00-6:30(09) (B. Singh)

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 biology, gender and the body, biotechnology, bioethics, caregiving and doctoring, and the global burden of disease.
Spr ANTH2230 S01 25329 Th 9:00-11:30(01) (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(08) (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(11) (P. Faudree)

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'

ANTH XLIST. Courses of Interest to Students Concentrating in Anthropology.

Spring 2018
The following courses, listed in other departments, may be of interest to students concentrating in Anthropology. Please check the course listings of the sponsoring department for times and locations.

Archaeology and the Ancient World
ARCH 0730 The Secrets of Ancient Bones: Discovering Ancient DNA
ARCH 2180 Memory and Materiality
ARCH 2184 Material Culture and the Bodily Senses: Past and Present

Modern Greek
MGRK 1220 Decolonizing Classical Antiquity: White Nationalism, Colonialism, and Ancient Material Heritage

Urban Studies
URBN 0230 Urban Life in Providence: An Introduction

Applied Mathematics
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 10:30-11:50(13) (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 24798 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.
Fall APMA0330 S01 16026 MWF 12:00-12:50(12) (V. Dobrushkin)
Spr APMA0330 S01 24796 MWF 12:00-12:50(05) (S. Akopian)

APMA 0340. Methods of Applied Mathematics I, II.
Mathematical techniques involving 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, or MATH 0350 or advanced placement. MATH 0520 (can be taken concurrently).
Fall APMA0350 S01 16038 MWF 2:00-2:50(07) (S. Akopian)
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 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.
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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
APMA 1650. 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.

APMA 1655. Statistical Inference I
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.

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.

APMA 1690. Computational Probability and Statistics
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., APMA 1650 or MATH 1610) is required, and some programming experience is strongly recommended. Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350, or equivalent placement.

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.

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.

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.

APMA 1940X. Topics in Information Theory and Coding Theory
This class builds on APMA 1710, but stresses applications of information and coding theory, rather than its mathematical foundations. The class provided an overview of widely used probabilistic methods and algorithms, such as Markov Chain Monte Carlo (MCMC), hidden Markov models (HMM), dynamic programming, belief propagation, and Bayesian inference. Information theory is used in combination with these algorithms as a framework to study applications such as code-breaking, speech recognition, image analysis and the study of genetic sequences. This class is best suited to students looking for topics for senior theses or capstone classes in applied mathematics, computer science and mathematics.

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.

APMA 2190. Nonlinear Dynamical Systems: Theory and Applications

APMA 2200. Nonlinear Dynamical Systems: Theory and Applications

APMA 2230. Partial Differential Equations
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.

APMA 2240. Partial Differential Equations
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.

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 is expected.
Fall APMA2550 S01 16031 W 3:00-5:30(17) (G. Kaniadakis)

APMA 2560. Numerical Solution of Partial Differential Equations II.
An introduction to weighted residual methods, specifically spectral, finite element and element methods. Topics include a review of variational calculus, the Rayleigh-Ritz method, approximation properties of spectral end 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. Kaniadakis)

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 APMA2570ES01 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 APMA2580ES01 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 classification and principal component analysis, MRF, consistency and asymptotic normality of Maximum Likelihood and estimators, statistical inference from noisy or degraded data, and computational methods (EM Algorithm, Markov Chain Monte Carlo, Bootstrap). Prerequisite: APMA 2630 or equivalent.
Fall APMA2670 S01 16029 Th 4:00-5:30(04) (B. Gidas)

APMA 2811W. Convex Analysis and Minimization Algorithms.
This course provides a solid mathematical presentation of modern convex analysis and convex optimization algorithms for large scale problems. Topics include: subdifferential calculus, duality and Fenchel-Legendre transform, proximal operators and Moreau’s regularization, optimal first-order methods, Augmented Lagrangian methods and alternating direction method of multipliers, network flows. The course will provide the mathematical and algorithmical underpinnings. It will also explore some applications in signal and image processing, optimal control and machine learning.
Fall APMA2811W S01 16146 TTh 2:30-3:50(03) (J. Darbon)

APMA 2811X. Finite Element Exterior Calculus.
In this course we will cover finite elements for the Hodge Laplacian. We start in three dimensions and discuss the Nedelec finite element spaces for $H^1$, $H(curl)$ and $H(div)$ and discuss the corresponding de Rham complex. We discuss how they can be applied to the Stokes problem and electro-magnetic problems. We then generalize these spaces to higher dimensions and show how to use them to approximate the Hodge Laplacian. We will mostly follow the review paper: [Finite Element Exterior Calculus: from Hodge Theory to Numerical Stability].
Fall APMA2811X S01 17163 MWF 10:00-10:50(14) (J. Guzman)

Traditional FEM seeks accuracy through mesh refinement whereas high order FEM seek to achieve accuracy through the use of increasingly high order polynomials. However, computer implementation and analysis of high order methods is considerably more complex than for traditional FEM. We will cover theory and implementation including: rate of convergence for problems with singularities, choice of basis functions, cost of computing element matrices and load vectors, and efficient solution of the resulting matrix equation. I will assume you are familiar with material in APMA2560 and have written your own piecewise linear FEM code.
Spr APMA2822A S01 25892 Th 4:00-5:30(17) (M. Ainsworth)

APMA 2980. Research in Applied Mathematics.
Section numbers vary by instructor. Please check Banner for the correct course number and CPN 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"

Archaeology and Ancient World
ARCH 0033. Past Forward: Discovering Anthropological Archaeology (ANTH 0500).
Interested students must register for ANTH 0500.
Fall ARCH0033 S01 17259 Arranged "To Be Arranged"

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 10:30-10:50(14) (L. Bestock)
ARCH 0201. Sport in the Ancient Greek World (CLAS 0210O). Interested students must register for CLAS 0210O. 
Fall ARCH0201 S01 16818 Arranged 'To Be Arranged'

ARCH 0203. Who Owns the Past? (ANTH 0066D). Interested students must register for ANTH 0066D. 
Spr ARCH0203 S01 25847 Arranged 'To Be Arranged'

ARCH 0221. Fake: A History of the Inauthentic (HMAN 0900B). Interested students must register for HMAN 0900B. 
Fall ARCH0221 S01 17263 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) (P. Van Dommelen)

ARCH 0415. Of Chiefs, Princesses and Warriors: Exploring Different Iron Ages. 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, princely burials and warriors, and urban settlements and monumental architecture that allegedly mark the transfer of ‘civilization’ from East to West. 
Fall ARCH0415 S01 16710 MWF 11:00-11:50(16) (P. Van Dommelen)

ARCH 0678. Underwater in the Mediterranean: An Introduction to Maritime Archaeology. Shipwrecks, sunken cargoes, coastal ports: all contribute to our understanding of the maritime world of the past, not least that of the Mediterranean Sea. This course will explore the Mediterranean’s ancient seafaring heritage over time, in particular by studying ancient ships and harbors as remarkable examples of social and technological innovation and enterprise. The methodological challenges faced by archaeologists working on underwater and coastal ‘sites’ will also be examined. Enrollment limited to 50.
Spr ARCH0678 S01 25917 MWF 1:00-1:50(06) 'To Be Arranged'

Spr ARCH0717 S01 25848 Arranged 'To Be Arranged'

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 Mesopotamia and from the Paleolithic through recent history. Topics will include: genetic relationships between humans, Neanderthals, and Denisovans; the peopling of the globe; diaspores; 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. Using contemporary approaches to cities and urban space, this course will explore cities of the ancient Near Eastern and Mediterranean world. What makes a city and how do we define “urban”? How do cities start? Do cities die? What are the primary factors that affect their development? We will analyze not only how the development of cities responded to specific historical and geographical conditions, but also how cities in different times and places were surprisingly similar in form and social activity. 
WRIT Fall ARCH1150 S01 16863 TTh 10:30-11:50(13) (M. Andrews)

ARCH 1162. Anthropology in/of the Museum (ANTH 1901). Interested students must register for ANTH 1901. 
Fall ARCH1162 S01 17540 Arranged 'To Be Arranged'

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 1233. Ancient Maya Writing (ANTH 1650). Interested students must register for ANTH 1650. 
Fall ARCH1233 S01 17261 Arranged 'To Be Arranged'

Spr ARCH1237 S01 25850 Arranged 'To Be Arranged'

ARCH 1282. Mediterranean Culture Wars: Archaic Greek History, c. 1200 to 479 BC (CLAS 1210). Interested students must register for CLAS 1210. 
Fall ARCH1282 S01 17265 Arranged 'To Be Arranged'

Fall ARCH1543 S01 17266 Arranged 'To Be Arranged'

ARCH 1600. Archaeologies of the Near East. Writing, urbanism, agriculture, imperialism: the ancient Near East is known as the place where earliest agriculture flourished, cities were developed and writing was invented. This course offers a detailed examination of the region’s archaeological history and current archaeological practice, in connection with its political engagements including Western colonialism and the formation of nation states. The social and cultural history of the Near East from prehistory to the end of Iron age (300 BC) will also be discussed. Studying the material remains of the ancient past, we will investigate various interpretive approaches and concepts used within Near Eastern archaeology. The main goal of the course is to develop a critical understanding of ancient societies and their material culture from an interdisciplinary, post-colonial perspective. 
Fall ARCH1600 S01 17402 TTh 1:00-2:20(10) (C. Walsh)

Fall ARCH1603 S01 17544 Arranged 'To Be Arranged'

ARCH 1606. Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia (ASYR 1100). Interested students must register for ASYR 1100. 
Spr ARCH1606 S01 25851 Arranged 'To Be Arranged'

Fall ARCH1621 S01 16819 Arranged 'To Be Arranged'

Spr ARCH1627 S01 25852 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. Bestok)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ARCH 1720. How Houses Build People.
Archaeologists usually worry about how people in the past built houses. This course will flip the question on its head and ask: how do houses build people? Just what is a ‘house’? What is a ‘home’? Making use of an array of regional case studies, from different time periods, we will question how cultural values and norms can be extracted from, and explore the idea of the domestication of humans through architecture. Enrollment limited to 50. Not open to first year students.
SPr ARCH1720 S01 25665 T 10:30-11:50(09) (M. Andrews)

ARCH 1771. Archaeology of Death (ANTH 1623).
Interested students must register for ANTH 1623.
SPr ARCH1771 S01 25853 Arranged 'To Be Arranged'

ARCH 1772. The Human Skeleton (ANTH 1720).
Interested students must register for ANTH 1720.
Fall ARCH1772 S01 17541 Arranged 'To Be Arranged'

Interested students must register for ENV 1910.
SPr ARCH1874 S01 25854 Arranged 'To Be Arranged'

ARCH 1882. Introduction to Geographic Information Systems for Environmental Applications (GEOl 1320).
Interested students must register for GEOl 1320.
Fall ARCH1882 S01 17282 Arranged 'To Be Arranged'

ARCH 1900. The Archaeology of College Hill.
A hands-on training class in archaeological 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 (i.e., actually dig and analyze the results!) 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).
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 16820 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)

Interested students must register for HIAA 2440D.
Fall ARCH2178 S01 17264 Arranged 'To Be Arranged'

ARCH 2180. Memory and Materiality.
What is the difference between memory, facts, and knowledge? This course uses memory as a lens through which to view recent critical theory and questions how theories of memory and materiality can be used by archaeologists to better understand the past.
Fall ARCH2180 S01 16954 T 4:00-6:30(09) (S. Moore)

How do the senses shape our experience? How many senses are there? How do ancient and modern art and material culture relate to bodily senses? What is material and sensorial memory, and how does it structure time and temporality? Using media and objects, including archaeological and ethnographic collections at Brown and beyond, this course will study how a sensorial perspective on materiality can reshape and reinvigorate research dealing with past and present material culture. Furthermore, we will explore how sensoriality and affectivity can decenter the dominant western modernist canon of the autonomous individual.
Fall ARCH2184 S01 17115 W 3:00-5:30(17) (Y. Hamilakis)

ARCH 2553. Introduction to Public Humanities (AMST 2650).
Interested students must register for AMST 2650.
Fall ARCH2553 S01 16995 Arranged 'To Be Arranged'

ARCH 2620. All Italia: City and Country in Ancient Italy.
This seminar approaches the urban and rural landscapes of peninsular Italy from the Early Iron Age until the Gothic Wars, with the goal being to examine key points of intersection (and departure) between the spheres of ‘town’ and ‘country’. Overall the seminar aims to contextualize Italian landscapes across both time and space and to that end we will consider issues pertaining to urbanism, economy, production, infrastructure, administration, architecture, and iconography. Enrollment limited to 20 seniors and graduate students.
Fall ARCH2620 S01 17401 W 12:30-3:00(15) (K. Schorie)

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 convergence 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 role 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 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, biotechnological, 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 professional, personal 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 100 First Year students, mandatory S/NC.
Fall BIOL0100 S01 16790 M 3:00-5:30(15) (K. Smith)

BIOL 0140A. Topics in Science Communications: Science Journalism Practicum.
Participants will understand how to read scientific research papers to interpret their findings and communicate these to a broader lay audience; analyze and understand best practices in science writing and the challenges of covering science for mass media; interviewing; fair and balanced coverage in reporting; give and receive peer feedback. Not for concentration credit in Biological Sciences programs. Enrollment limited to 10. Instructor permission required. S/NC WRIT
Spr BIOL0140A S01 25533 W 5:00-6:30 (S. Turner)

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 will educate, inform, and make 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(17) (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 these methods 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/NC. FYS
Fall BIOL0150A S01 16188 T 5:00-8:00PM(05) (J. Hall)

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 repair or replace 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
Spr BIOL0150D S01 25908 Arranged (T. Achilli)

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 2:00-5:00(07) (T. Achilli)

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 0220, or equivalent placement. This course does carry Biology concentration credit.
Fall BIOL0180 S01 15657 MW 8:30-9:50(01) (P. Shank)

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, population biology, molecular biology and physiology. This 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 virus 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, 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 virus 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)

BIOL 0190U. The Lives of Plants.
This course examines the lives of plants through their development, structure, function, reproduction, and responses to environmental conditions. Enrollment limited to 20 first year students. FYS WRIT

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 (contact Jody_Hall@brown.edu); 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. 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)

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 sophomores and junior students planning to enter research careers. Expected: Students have previously taken or are concurrently enrolled in 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(16)  (S. Taylor)
Spr  BIOL0285 S02  25435  TTh  2:30-6:30(16)  (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. Assessment 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(14)  (D. Weinreich)

Many questions about the workings of living creatures can be answered by joining math, physics, and biology. We will identify basic physical 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(07)  (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  TTh  9:00-10:20(08)  (P. Ewanchuk)

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  TTh  9:00-10:20(01)  (J. Witman)

BIOL 0430. The Evolution of Plant Diversity.
Examines the evolutionary history of plants from a phylogenetic perspective. Introduces 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(08)  (F. Jackson)

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

Fall BIOL0440 S01 25436 TTh 10:30-11:50(09) (A. DeLong)

Will enable 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(10) (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 background: 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(13) (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 software. Expected: BIOL 0200 (or equivalent placement).

Fall BIOL0480 S01 16373 MWF 9:00-9:50(01) (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(09) (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(02) (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(06) (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, autoimmunity, 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 virus related diseases but any microbial outbreak in the news will be explored. The seminar will cover basic aspects of microbial pathogenesis so students can gain an appreciation of microbial host interactions. Essential writing skills will also be developed. Enrollment limited to 20 sophomores 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 that occur within 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(07) (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.

**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.

**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 2080 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)**

**BIOL 1070. Biotechnology and Global Health.**
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 16058 TTh 2:00-3:30(03) (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 bioerodible 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 1:00-3:30(03) (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 0010. 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 1140. Tissue Engineering.**
Tissue engineering is an interdisciplinary field that incorporates progress in cellular and molecular biology, materials science, and engineering, to advance the goal of replacing or regenerating compromised tissue function. Using an integrative approach, we will examine tissue design and development, manipulation of the tissue microenvironment, and current strategies for functional reconstruction of injured tissues. Expected: CHEM 0330, plus BIOL 0500 or 0800. Enrollment limited to 20. Instructor permission required.

**Fall BIOL1140 S01 17077 Th 3:00-5:50(03) (C. Kofron)**

**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. Haji)**

**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 (W. Fairbrother)**

**BIOL 1250. Host-microbiome Interactions in Health and Disease.**
Will focus on current understanding of how various microorganisms 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. This 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(11) (P. Beelenky)**
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Expected Enrollment</th>
<th>Meeting Times</th>
<th>Instructor</th>
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<tr>
<td>BIOL 1260</td>
<td>Physiological Pharmacology</td>
<td>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.</td>
<td>Fall BIOL1260 0S1 16065 MWF 10:30-11:50(13) (J. Marshall)</td>
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<td>BIOL 1270</td>
<td>Advanced Biochemistry</td>
<td>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.</td>
<td>Fall BIOL1270 0S1 16212 TTh 2:30-3:50(03) (A. Deaconescu)</td>
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<td>BIOL 1290</td>
<td>Cancer Biology</td>
<td>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, oncogenes, viruses, tumor immunology, metastasis, cancer chemotherapy and drug resistance. Lecture plus discussion of primary literature. Prerequisites: BIOL 0280 OR BIOL 0470 OR BIOL 0500.</td>
<td>Fall BIOL1290 0S1 15794 MW 3:00-4:20(17) (A. Zhiltovich)</td>
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<td>BIOL 1310</td>
<td>Developmental Biology</td>
<td>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.</td>
<td>Fall BIOL1310 0S1 16214 TTh 9:00-10:20(08) (K. Wharton)</td>
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<td>BIOL 1330</td>
<td>Biology of Reproduction</td>
<td>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.</td>
<td>Spr BIOL1330 0S1 25442 M 3:00-5:30(13) (G. Wessel)</td>
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<td>BIOL 1420</td>
<td>Experimental Design in Ecology</td>
<td>An overview and discussion of the basic principles used to design lab and field experiments in ecology and environmental science. Topics include: replication and statistical power, appropriate use of factorial designs, nonparametric methods, post hoc tests, natural versus manipulative experiments, experimental artifacts and impact study design. Discussions based on primary literature and a new text. Expected: BIOL 0420.</td>
<td>Fall BIOL1420 0S1 17191 W 3:00-5:30(17) (J. Witman)</td>
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<td>BIOL 1430</td>
<td>Population Genetics</td>
<td>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.</td>
<td>Fall BIOL1430 0S1 16381 MWF 11:00-11:50(16) (D. Weinreich)</td>
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<td>BIOL 1450</td>
<td>Community Ecology</td>
<td>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.</td>
<td>Spr BIOL1450 0S1 25406 MWF 10:00-10:50(03) (J. Kelner)</td>
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<td>BIOL 1470</td>
<td>Conservation Biology</td>
<td>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.</td>
<td>Fall BIOL1470 0S1 16382 TTh 9:00-10:20(08) (D. Sax)</td>
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<td>BIOL 1495</td>
<td>500 Million Years of Land Plants</td>
<td>Explores the evolution of terrestrial plants and the ecosystems they structure. Introduces the fossil record of plants and basic patterns of plant diversification on land. Highlights major trends in the evolution of plant morphology, anatomy, and ecology. Lectures survey the diversity and community structure of different geological time periods. Weekly discussion sections, field trips, and assignments examine major evolutionary trends, particularly with regard to climatic changes over time. Expected: BIOL 0400, BIOL 0430, (or equivalent placement). Enrollment limited to 15 students; instructor permission; register for section and conference.</td>
<td>Fall BIOL1495 0S1 17055 MWF 9:00-9:50(01) (A. Leslie)</td>
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<td>BIOL 1500</td>
<td>Plant Physiological Ecology</td>
<td>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.</td>
<td>Spr BIOL1500 0S1 25509 TTh 1:00-2:20(10) (E. Edwards)</td>
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<td>BIOL 1520</td>
<td>Innate Immunity</td>
<td>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.</td>
<td>Fall BIOL1520 0S1 15661 MW 8:30-9:50(01) (L. Brossay)</td>
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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 1555. Methods in Biomedical Informatics.
Will provide a methodological survey of approaches used in biomedical informatics. Particular emphasis given to formalisms and algorithms used within the context of biomedical research and health care, including those used in biomolecular sequence analysis, electronic health records, clinical decision support, and public health surveillance. Practical programming skills will also be taught within these contexts. The final project of the course is to demonstrate an understanding of biomedical informatics approaches through development of a solution within biomedical research or healthcare context. Prerequisite: introductory statistics course. Enrollment: 30 students. For biological science concentrators, graduate students, others with permission.

Spr BIOL1555 S01 25687 W 3:00-5:30(14) (N. Sarkar)

BIOL 1560. Virology.
Emphasizes the understanding of molecular mechanisms of viral pathogenesis. Begins with a general introduction to the field of virology and then focuses on the molecular biology of specific viruses that are associated with human disease. Lectures based on current literature. Prerequisite: BIOL 0280, 0470, or 0530, or instructor permission.

Fall BIOL1560 S02 17383 Arranged (P. Shank)

BIOL 1565. Survey of Biomedical Informatics
Survey course provides overview of field of biomedical informatics. Topics include computer science, healthcare, biology, social science. This course is designed to be complementary to BIOL 1555. Focuses on understanding the organization of biomedical information, effective management of information using computer technology, impact of such technology on biomedical research, education, patient care. Major aim explores the process of developing and applying computational and information science techniques for assessing current information practices, determining information needs of health care providers and patients, developing interventions or supporting clinical practice using informatics, and evaluating the impact of informatics solutions from a biomedical perspective.

Fall BIOL1565 S01 17079 TTh 10:30-11:50(13) (N. Sarkar)

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 alternative 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 toxins 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 TTh 10:30-11:50(09) (J. Plavicki)

BIOL 1880. Comparative Biology of the Vertebrates.
The biology, structure, and evolutionary history of the vertebrates considered phylogenetically, emphasizing evolution of the major body systems. Stresses an evolutionary approach to the correlation of structure and function with environment and mode of life. Labs include dissection of several different vertebrates and comparative osteological material. Emphasis of course is on critical thinking rather than memorization of material. Recommended: BIOL 0320 or 0800. First year students must obtain instructor permission to register. Enrollment limited to 32. Students MUST register for the lecture section and the lab.

Spr BIOL1880 S01 25825 MWF 11:00-11:50(04) (A. Chew)

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 3:00-5:30(14) (L. Braun)
BIOL 1950. Directed Research/Independent Study. 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 1960. Directed Research/Independent Study. 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 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(15) (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(09) (N. Neretti)

BIOL 2018. Management Strategies in Biotechnology. 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(13) (Y. Jong)

BIOL 2020. Biotechnology Science and Industry. 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 (ECNO110)/equivalent or instructor's permission is required. Fall BIOL2020 S01 16067 Th 4:00-6:30(04) (J. Scott)

BIOL 2030. Foundations for Advanced Study in the Life Sciences. 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 MTh 9:00-10:20(14) (A. DeLong)
Fall BIOL2030 S01 16224 F 10:00-11:35(14) (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(07) (G. Williams)

BIOL 2050. Biology of the Eukaryotic Cell. (Undergraduate students should register for BIOL 1050.) Fall BIOL2050 S01 16209 TTh 1:00-2:20(10) (K. Miller)

BIOL 2089. The Importance of Intellectual Property in Biotechnology. This course delves into the various roles of intellectual property in biotechnology. In addition to providing a solid foundation in the fundamentals of intellectual property, the course will use case studies in biotechnology to explore in depth the interplay between specific scientific breakthroughs and intellectual property. An understanding of the science of biotechnology is critical for advanced understanding of the value and possibilities of biotechnology intellectual property. Fall BIOL2089 S01 17242 Arranged (J. Morgan)

BIOL 2121. The Biochemistry of Signaling and Regulation from Prokaryotes to Eukaryotes. Proteins are the engines of life. Determining how they function from a biophysical and biochemical perspective enables us to understand how they work and how we can direct and alter their activities. Proteins participate in cellular signaling pathways that are important regulators of cellular function and are often misregulated in disease. This course introduces various aspects of biochemistry involved in the analysis of cellular signaling pathways that regulate disease. Open to 12 graduate students and advanced undergraduates. Prerequisite: Students must have taken several advanced undergraduate-level courses in biology. Spr BIOL2121 S01 25840 Arranged (A. Deaconescu)
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(08) (R. Campbell)
Spr BIOL2125 S01 25368 WF 10:30-11:50(03) (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(07) (K. Mowry)
Fall BIOL2150 S01 16227 F 12:00-3:30(07) (J. Bender)

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 2280 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 TTh 1:30-3:20(11) (E. Mathiowitz)

BIOL 2167. In Vivo 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(11) (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(14) (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 environment to 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 MW 10:00-11:50(14) (B. Zielinski-Habershaw)
Spr BIOL2180 S01 25376 MW 10:00-11:50(14) (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(12) (D. Horrigan)

BIOL 222B. 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 BIOL222B S01 16805 Arranged (W. Fairbrother)

BIOL 2230. Biomedical Engineering and Biotechnology Seminar.
Biomedical engineering and biotechnology are interdisciplinary fields that incorporate progress in biomedical sciences, the physical sciences, and engineering. To achieve success in these fields requires facility with interdisciplinary oral communication – this is the specific and practical focus of this course. Each week, students will give research presentations and receive feedback from the audience to help improve their public speaking skills.
Fall BIOL2230 S01 16567 T 4:30-7:00(09) (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(18) (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(14) (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 2260.
Fall BIOL2260 S01 16066 Th 10:30-11:50(13) (J. Marshall)

BIOL 2270. Advanced Biochemistry.
(UGraduate students should register for BIOL 1270.)
Fall BIOL2270 S01 16213 Th 2:30-3:50(03) (A. Deaconescu)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 provide a powerful approach to dissect complex biologic problems. We will focus on fascinating discoveries from "forward genetic" 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(17) (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, 0860. Enrollment limited to 20. Advanced undergraduates with permission of instructor.

Spr BIOL2350 S01 25408 Th 2:00-5:00(17) (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(16) (D. Rand)
Spr BIOL2440 S02 25493 Arranged(16) '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(01) (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(07) (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 (T. Bartnikas)

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 14951 Arranged 'To Be Arranged'
Spr BIOL2970 S01 23982 Arranged 'To Be Arranged'

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

Biol 2985. Graduate Seminar.
Section numbers vary by instructor. Please see the registration staff for the correct section number to use when registering for this course.

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"

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.

BioMed-Neuroscience

Neuro 0010. The Brain: An Introduction to Neurosciences.
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 the high school level is assumed.

Fall NEUR0010 S01 16566 TTh 1:00-2:20(10) (M. Paradiso)

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 25189 MWF 1:00-1:50(06) (J. Simmons)

Neuro 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. Bienvenouk)

Neuro 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)

Neuro 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. Alzabenam)

Neuro 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 16568 TTh 10:30-11:50(13) (M. Linden)

Neuro 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, computational, single neuron and human studies.

Spr NEUR1440 S01 25938 Arranged (C. Moore)

Neuro 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)

Neuro 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(15) (J. Stein)
Spr NEUR1600 S02 25390 W 1:00-5:50(15) (J. Stein)

Neuro 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, NEUR 1020, and NEUR 1030.

Fall NEUR1650 S01 16588 TTh 2:30-3:50(03) (D. Berson)

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)

Neuro 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 monogenic 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.
To sign up, please add this course to your primary cart. Doing so does not mean that you are automatically enrolled in this class. This decision will be made based on a variety of factors including, but not limited to, time you added the course to your cart, seniority, concentration requirement, etc.
Fall NEUR1930G S01 16589 Arranged (J. Fallon)

NEUR 1930H. Neurological Disorders: Neural Dynamics + Neurotechnology.
A seminar course on neural dynamics and therapeutic approaches based on open-/closed-loop Brain-Computer Interfaces (BCIs) and neuromodulation for neurological and neuropsychiatric disorders. Topics include: (1) Disorders of consciousness: loss-of-consciousness in generalized epileptic and psychogenic seizures; closed-loop seizure control; Coma, medically induced coma and general anesthesia; Neuromonitoring of consciousness; (2) BCIs for auditory/visual/somatosensory disorders; (3) Movement disorders: BCIs for restoring movement/communication; adaptive-DBS for Parkinson’s disease and essential tremor. (4) Neuropsychiatric disorders: DBS for major depression and obsessive compulsive disorder. Enrollment is capped at 20. Sign-up sheet: Sidney Frank Hall, Room 315, beginning on the first day of registration. Instructor permission required.
Fall NEUR1930H S01 25682 Arranged (W. Truccolo)

NEUR 1930J. 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 NEUR1930J S01 25205 Arranged (J. Sanes)

NEUR 1930N. Region of Interest: An In-Depth Analysis of One Brain Area.
An 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. Topic Fall 2017: Cerebellum
To sign up, please add this course to your primary cart. Doing so does not mean that you are automatically enrolled in this class. This decision will be made based on a variety of factors including, but not limited to, time you added the course to your cart, seniority, concentration requirement, etc.
Fall NEUR1930N S01 16591 W 12:30-3:00(07) (M. Linden)

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.

NEUR 2010. Graduate Proseminar in Neuroscience.
A study of selected topics in experimental and theoretical neuroscience. Presented by neuroscience faculty, students, and outside speakers. A required course for all students in the neuroscience graduate program.
Fall NEUR2010 S01 16593 Arranged (G. Barnea)

See Graduate Pro-Seminar In Neuroscience (NEUR 2010) for course description.
Spr NEUR2020 S01 25212 Arranged (G. Barnea)

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. Barnea)

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 sensory, regulatory, and motor systems. Enrollment limited to graduate students. Spr NEUR2050 S01 25963 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.
Fall NEUR2060 S01 17462 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. Example datasets include neuronal spike trains, local field potentials, ECoG/EEG, and fMRI. 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)

**NEUR 2980. Graduate Independent Study.** 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)

**Medical Education**

**MED 2040. Health Systems and Policy II.** This course will offer an overview of the critical issues in U.S. healthcare and public health policy. It will also provide future leaders in population medicine with a foundation for analyzing healthcare reform and public health efforts and for identifying the role of physicians in driving and shaping future policy reforms to improve the healthcare system and population health.

Fall MED2040 S01 17435 Arranged (E. Tobin-Tyler)

**MED 2045. Quantitative Reasoning.** In this course, students will be introduced to fundamental concepts in clinical epidemiology and basic statistics, as they relate to population and clinical research. This course is intended to teach students both the basic knowledge required to develop and interpret clinical studies as well as the skills in order to conduct basic statistical analyses.

Fall MED2045 S01 17436 Arranged (D. Anthony)

**MED 2046. Leadership in Health Care.** This course emphasizes practical application of teamwork and leadership skills across multiple settings. Leadership in Health Care is a master’s level course for second year medical students enrolled in the Primary Care-Population Medicine (PC-PM) program. Through interactive classroom sessions, field work in health care advocacy, and a team-based “leadership action project”, students will develop foundational leadership skills. The first formal leadership course at Alpert Medical School, Leadership in Health Care will contribute to the PC-PM program’s ultimate goal of preparing physician leaders who will improve the quality of health care and wellness of the population.

Fall MED2046 S01 17450 Arranged "To Be Arranged"

**MED 2110. Introduction to Medical Sciences and Patient Care.** This 2-week intensive course introduces students to the wide variety of topics explored in the Master’s of Medical Sciences program, with a focus on patient care aspects. The course combines seminar classroom instruction with field work/immersion at community healthcare sites. Topics covered include: biopsychosocial model of healthcare; intersection between science, social science and humanities in healthcare; introduction to community health centers; professionalism in healthcare; basic healthcare communication skills; quality improvement skills; and strategies for mastery of basic science knowledge. Students will be assessed using multiple methods including: seminar participation, reflective essays/field notes, attendance at field-work sites, & assessment from community mentors.

Fall MED2110 S01 17393 Arranged (G. Anandarajah)

**MED 2120. Patient Care in Complex Systems I.** This is the second of a three course series for Master of Medical Sciences students. This course introduces students to the variety of complex factors affecting health, imparting both theoretical knowledge and practical skills. Teaching methods: interactive seminars and experiential learning at community healthcare sites with members of multidisciplinary teams. Topics covered: healthcare systems, social determinants of health, roles of interdisciplinary healthcare team members, quality improvement, and epidemiology. Students will begin developing a project at their clinical sites which will be implemented in spring semester. Student assessment includes: seminar participation, reflective essays, attendance at field-work sites, and assessment from community mentors. Pre Requisites: MED 2110

Fall MED2120 S01 17394 Arranged (G. Anandarajah)

**MED 2130. Patient Care in Complex Systems II.** This is the third of a 3 course sequence for Master of Medical Science students. Students will continue their study of both theoretical and practical aspects of healthcare through an interactive seminar series, continued service learning at their longitudinal community healthcare site, and completion of their community project. Seminar topics: care of vulnerable populations, environmental health, population health, new models of healthcare delivery, ethical issues in healthcare, whole-person health, cultural humility, complementary and alternative medicine, and patient advocacy. Students assessment includes: seminar participation, reflective essays, attendance at field work sites, assessment from community mentors, and quality of project and presentation. Pre Requisites: MED 2110 and MED 2120.

Spr MED2130 S01 25914 Arranged (G. Anandarajah)

**MED 2140. Human Histology.** Human Histology provides an in-depth examination of the basic architecture of the body. Fundamental to this understanding is the cell and how during early development cells in the aggregate undergo specialization as tissues, which are the building blocks of the body. This course focuses first on the biology of the four basic tissues (epithelium, connective tissue, muscle and nerve) and second, how they contribute to the functional anatomy of all organs and systems. We will emphasize characteristic developmental, structure-function and regulatory relationships within normal cells and tissues, which in turn are the foundation for the understanding of pathological alteration.

Fall MED2140 S01 17395 Arranged (J. Ou)

**MED 2150. General Pathology.** Pathology is the study of the causes, mechanisms, and consequences of disease. In General Pathology students study in detail the cell and tissue alterations that lead to the production of human diseases. To uncover such alterations, morphological observations are correlated with studies involving molecular biology, biochemistry, and genetics. In studying the pathogenesis of human disease we pay close attention to epidemiological parameters, population health, aging, and to environmental and occupational health problems. General Pathology been integrated, whenever possible, with other courses in the Fall Semester of the Gateways Program, in order to maximize learning opportunities.

Fall MED2150 S01 17398 Arranged (L. Dumenco)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MED 2160. Human Anatomy 1.
This course explores the anatomical organization of the human body, viewing anatomical structures as a product of development and functional demand. Human Anatomy provides an opportunity for students of diverse backgrounds, interests, and goals to emerge with an understanding of the human body as a cornerstone of medical science. The course uses a combination of lectures, on-line modules, and mandatory laboratory sessions examining human cadaver dissections, to impart broad conceptual and in-depth knowledge of this subject.

Fall MED2160 S01 17399 Arranged (E. Brainerd)

MED 2170. Scientific Foundations of Medicine.
Scientific Foundations of Medicine is an integrated cross-disciplinary course that introduces the fundamental basic science principles relevant to the study of health, disease mechanisms and clinical medicine. As such the course consists of six blocks of core topics that incorporate foundational principles of molecular biology, cellular and metabolic biochemistry, nutritional science, cell physiology, inheritance patterns, mechanisms of genetic disorders, and immunology. Grounding in these scientific principles gives students insight into the biological complexity and genetic diversity that underlies disease processes.

Fall MED2170 S01 17400 Arranged “To Be Arranged”

MED 2180. Brain Sciences and Neurological Disease.
Brain Sciences is composed of several interrelated components - Head Anatomy, Neurobiology, Neuropathophysiology, Neuropathology and Neuropharmacology. The intent of the course is to encourage the integration of underlying neuroanatomy and basic science principles with an understanding of the presentation and management of neurological diseases. Course leaders from each of these disciplines have worked closely together in order to present the material in a cohesive and logical framework that promotes the sequential acquisition of new information based upon a substantive understanding of the previous material.

Spr MED2180 S01 25915 Arranged (J. Robb)

MED 2190. Microbiology and Infectious Disease.
Microbiology and Infectious Disease is an integrated course that introduces the basic biological principles, pathogenesis and host response, disease presentation, epidemiology, control and treatment of parasites, viruses, fungi and bacteria that cause human disease. Emphasis is placed on the most clinically significant and best characterized pathogens in each group. The Microbiology component of the course explores the characteristics of disease-causing microorganisms, mechanisms of transmission, immunity, and how specific microbial pathogens cause disease. Microbial disease states in multiple organ systems are addressed in the Infectious Disease component of the course with a focus on common infectious diseases and their clinical presentation.

Spr MED2190 S01 25916 Arranged (J. Lonks)

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 0400. Introduction to Medical Illustration.
This semester course explores the field of medical illustration and its many facets. Depiction of diseases, anatomy, medical practices and surgical procedures has been around since antiquity. Not only has medical illustration evolved over the centuries, it has played the role of historian, documenting the beliefs and knowledge of its time. Today, medical illustration is as present as ever despite the advent of other methods of medical documentation, including photography and videography. Most physicians draw. We are not all artists, but we often use pictures instead of thousands of words whether to explain medical concepts to students or procedures to patients.

Fall PLME0400 S01 17455 TW 4:00-6:00(09) (J. Ip)

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 8:30-9:50(01) (J. Ip)

Business, Entrepreneurship and Organizations

BEO 1930A. BEO Capstone I: Organizational Studies Track.
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

Fall BEO1930A S01 15998 Th 1:00-2:20(10) (L. DiCarlo)

BEO 1930B. BEO Capstone I: Entrepreneurship and Technology Management Track.
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

Fall BEO1930B S01 15999 Th 1:00-2:20(10) (S. Petteruti)

BEO 1930C. BEO Capstone I: Business Economics Track.
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 home writing, presentational, leadership and organizational skills. Application required to match students to projects. Project team meetings required outside scheduled lectures. WRIT

Fall BEO1930C S01 16000 Th 1:00-2:20(10) (T. Nguyen)

BEO 1940A. BEO Capstone II: Organizational Studies Track.
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

Spr BEO1940A S01 24773 Th 1:00-2:20(10) “To Be Arranged”

BEO 1940B. BEO Capstone II: Entrepreneurship and Technology Management Track.
Continuation of Semester 1, BEO Capstone I: Entrepreneurship and Technology Management Track (BEO 1930B). This course involves the completion of team projects begun in fall semester. Non-BEO concentrators require instructor permission. WRIT

Spr BEO1940B S01 24774 MW 1:00-1:50(06) “To Be Arranged”

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Course allows concentrators to complete BEO 1930 as an independent study due to scheduling conflicts.

Chemistry

CHEM 0080E. 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 CHEM0080E/S01 16828 TTh 9:00-10:20(08) (K. Hess)

CHEM 0080A. First Year Seminar- Energy.
An introductory study of the scientific foundation of energy, fundamental physical, chemical, and thermodynamic aspects of common (fossil, nuclear) as well as novel (fuel cells, solar, wind, etc.) energy sources. Concentrates on scientific principles, but includes discussion on resources and reserves, environmental impact, current usage, and future needs. For students of all disciplines who are interested in obtaining an understanding of scientific principles of energy. Enrollment limited to 20 first year students. FYS
Spr CHEM0080A/S01 25900 M 3:00-5:30(13) (P. Weber)

CHEM 0100. Introductory Chemistry.
Explores stoichiometry, atomic and molecular structure, chemical bonding, solutions, gases, chemical reactions, equilibria, thermodynamics. Three hours of lecture, one conference per week, no laboratory section. S/NC.
Fall CHEM0100 S01 16603 TTh 9:00-10:20(08) (V. Colvin)

CHEM 0330. Equilibrium, Rate and Structure.
Explore the electronic structure of atoms and molecules, thermodynamics, equilibrium, reaction stoichiometry, rate, and reaction mechanisms. Course includes lecture and laboratory. Enforces regular completion of homework. 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 20. To qualify for consideration, the student must be struggling in the midterm exams and 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.

Spring CHEM0332 S01 25262 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S02 25263 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S03 25264 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S04 25265 Arranged(17) (S. Russo-Rodriguez)

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 prelab 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 S01 25260 Arranged(17) (C. Morton)
Spr CHEM0350 S02 25261 Arranged(17) (C. Morton)
Spr CHEM0350 S03 25262 Arranged(17) (C. Morton)
Spr CHEM0350 S04 25263 Arranged(17) (C. Morton)

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 prelab 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 S01 16621 Arranged (To Be Arranged)
Fall CHEM0360 S02 16619 MWF 9:00-9:50(11) (M. Zimmt)
Fall CHEM0360 S03 16620 TTh 9:00-10:20(11) (C. Morton)

CHEM 0332. Equilibrium, Rate and Structure - Tutorial.
The CHEM 0332 tutorial program offers students the opportunity to master the concepts taught in the fall semester CHEM 0330: Equilibrium, Rate and Structure course by focusing on active problem solving. Students who struggle 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 20. To qualify for consideration, the student must be struggling in the midterm exams and 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.

Spring CHEM0332 S01 25262 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S02 25263 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S03 25264 Arranged(17) (S. Russo-Rodriguez)
Spr CHEM0332 S04 25265 Arranged(17) (S. Russo-Rodriguez)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 MW 11:00-11:50(04) (O. Chen)

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 MW 9:00-9:50(01) (O. Chen)

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 ENGN 0030 and ENGN 0040.

Fall CHEM1140 S01 16626 MW 10:00-10:50(14) (L. Wang)

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 MW 10:00-10:50(03) (L. Wang)

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(06) (G. Diebold)

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) (S. Delaney)

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 MW 9:00-10:20(01) (C. Seto)

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) (A. Basu)

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, NOEY, ROSEY, EXSY, and DOSY methodology. This course will not focus on structure determination or spectral interpretation but rather on experimental methodology.

Spr CHEM1560G S01 25280 MW 10:00-10:50(03) 'To Be Arranged'

CHEM 1560J. Topics in Bioinorganic Chemistry.
Covers current topics of bioinorganic chemistry with review of fundamental inorganic and biological chemistry. Topics include metal ion transport and storage, oxygen metabolism, electron transfer, respiration and photosynthesis, metal ion receptors and signaling, hydrolytic chemistry, metallo-neurochemistry, and medicinal bioinorganic chemistry. Students are strongly urged to complete both CHEM 0500 and CHEM 0360 prior to this special topics course.

Spr CHEM1560J S01 25902 MW 8:30-9:50(02) (E. Kim)

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.

Spr CHEM1560K S01 25286 Arranged 'To Be Arranged'

CHEM 1560N. Organometallic Chemistry.
This course intends to help students understand structures and reactions of transition metal compounds 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 and CHEM 0500. PLEASE NOTE: This class is WRIT designated for Undergraduates Only. Graduate Students register for CHEM2510. WRIT

Fall CHEM1560N S01 16829 TTh 10:30-11:50(13) (J. Robinson)

CHEM 1620A. Photoacoustics.
Prerequisite: CHEM 1140 or equivalent.

Fall CHEM1620A S01 17375 TTh 1:00-2:20(10) (G. Diebold)

CHEM 1620B. Spectroscopy.
Prerequisite: CHEM 1140 or equivalent.

Fall CHEM1620B S01 17385 MW 3:00-4:20(17) (C. Rose-Petruck)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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: CHEM350, PHYS 0030 or 0050, BIOD220 recommended.
Fall CHEM1700 S01 16628 MWF 11:00-11:50(16) (S. Sun)

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) (B. Rubenstein)

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) (R. Stratt)

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 and CHEM 0500.
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) (S. Sun)

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, carbocations, carbanions, and carbenes.
Fall CHEM2410 S01 16631 MWF 10:00-10:50(14) (C. Seto)

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 TTh 9:00-10:20(08) (A. Basu)

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.
Spr CHEM2430 S01 25283 F 1:00-3:00(07) (E. Victor)
Spr CHEM2430 S01 25283 MW 11:00-11:50(07) (E. Victor)

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) (P. Weber)

CHEM 2780. Quantum Mechanics.
Semester II: Lectures consider the theory and application of time-dependent quantum mechanical methods in chemical physics. Both few and many-body methods are described and discussions include the correlation function formulation of chemical dynamics. Numerical path integral methods for equilibrium and dynamical problems are introduced. Prerequisite: CHEM 2770.
Spr CHEM2780 S01 25284 MWF 11:00-11:50(04) (B. Rubenstein)

CHEM 2870. Departmental Colloquia.
No description available. Open to graduate students only.
Fall CHEM2870 S01 16634 F 4:00-5:20(15) (C. Seto) Spr CHEM2870 S01 25285 F 4:00-5:50(15) (K. Hess)

CHEM 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 CHEM2970 S01 14953 Arranged 'To Be Arranged'
Spr CHEM2970 S01 23984 Arranged '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 a thesis.
Fall CHEM2990 S01 14954 Arranged 'To Be Arranged'
Spr CHEM2990 S01 23985 Arranged 'To Be Arranged'

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

Classics

Classics

CLAS 0150. Sport in the Ancient Greek World.
Aristotle, Epicurus, Lucretius, Augustine, and Dante. WRIT 1; how, and how far, reason can provide for its realization; what social/ economic happenings. Authors include Euripides, Thucydides, Plato, Aristotle, Epicurus, Lucretius, Augustine, and Dante. WRIT
Fall CLAS0150 S01 15689 MWF 12:00-12:50(12) (L. Ladley)

CLAS 0210. 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?; 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
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall CLAS0210C S01 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 around Greek and Latin texts: the foundation of a gentleman’s education in early America. This course will explore early ideas and structures of higher learning in the US from the springboard of those 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 American intellectual history, debates about the value (and "use") of the humanities and liberal education, and Brown’s particular history and mission. 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. Kidd)

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 Thesmophoriazœ 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.

Captured 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. Papaoanou)


What do video vixens and Foxy Brown have in common with "Witchy Woman"? These modern metaphors continue a long history of equating female sexual allure with dangers found in/or capable of subverting Nature. This course will use contemporary methodologies to make sense of similar descriptions of women found in Greco-Roman literature: how do the Greeks and Romans express a concern about gender, ethnicity, class, and/or politics using these metaphors? How do these same categories help distinguish what is "natural" from "unnatural"? To what end does this discourse about women and nature affect law, public space, or other aspects of "civilization"?
Fall CLAS0765 S01 17014 TTh 9:00-10:20(08) (S. Eccleston)

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. DPLL 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 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 multilingual empires they conquered, including Egypt and Persia. Greek becomes a medium for thinking in the literatures of ancient Greece and Rome (Plautus, Terence), England (Shakespeare), and the continued influence of 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 Sāṃkhya, Yoga, Theravada Buddhism, Mahāyāna Buddhism, Jainism, and Vedānta) and the schools that concentrate on issues of logic, metaphysics, and language and hermeneutics (Nyāya, Vaiśeṣika, and Pūrva Mīmāṃsā, respectively). DPLL
Fall CLAS1140 S01 15685 TTh 1:00-2:20(10) (D. Buchta)

CLAS 1210. Mediterranean Culture Wars: Archaic Greek History, c. 1200 to 479 BC.

From the end of the Bronze Age to the end of the Persian Wars is a period of considerable change in the Mediterranean and beyond. The Greek polis challenges the powers of the ancient Near East. Over seven centuries we meet Greek writing, Homeric epic, and the first historian (Herodotus). But the Greek world lay on the edges of the Ancient Near East and this course tries to offer a more balanced approach than the typically Hellenocentric perspective of the standard textbooks. CLAS 1210 addresses political, social and economic history. Literary, epigraphical and archaeological cultures provide the evidence. WRIT
Fall CLAS1210 S01 15682 MWF 2:00-2:50(07) (G. Oliver)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CLAS 1220. The Fall of Empires and Rise of Kings: Greek History 478 to 323 BC.
The Greek world was transformed in less than 200 years. The rise and fall of Empires (Athens and Persia) and metamorphosis of Macedon into a supreme power under Philip II and Alexander the Great provide the headlines. The course covers an iconic period of history, and explores life-changing events that affected the people of the eastern Mediterranean and the topics that allow us to understand aspects of life and culture of the peoples of the eastern Mediterranean, and through these transformations, offers insights into the common pressures that communities confronted. No prior knowledge of ancient history is required.

Section numbers vary by instructor. Please check Banner for the correct CRN to use when registering for this course.
Spr CLAS122O S01 25882 2:00-2:50PM(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 2:30-3:50PM(03) (J. Bode)

CLAS 1420. The Culture of Death in Ancient Rome.
This course examines the way that death and dying were perceived and managed in ancient Roman culture. Primary source readings will include selections from philosophers, poets, inscriptions, and a variety of prose literature (consolations, epitapology, historiography, novels). Secondary literature will focus on demography and social relations, the anthropology of funerary ritual, and material culture, which will be integrated systematically throughout the course, and which will include consideration of artistic representations and iconography, as well as the archaeology of Roman mortuary practices.
Fall CLAS1420 S01 25670 2:30-3:50PM(11) (J. Bode)

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 9:00-9:50AM(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 (detections 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 2:30-3:50PM(11) (A. Scafuro)

CLAS 1930C. Parasites and Hypocrites.
The course is a study of the many forms of toadying, 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 6:40-8:00PM(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 9:00-10:20AM(08) (J. Debroux)

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 3:00-5:30PM(15) (J. Bode)

CLAS 2080G, Hellenistic Athens: A Post-Imperial City of Culture in a Changing World.
This research seminar is focused on three themes: political, socioeconomic, 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 Laman 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 3:00-5:30PM(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.
Fall 2017

The following courses may be of interest to students who are interested in Classics. Classics concentrators should talk to their concentration advisor to see which of these courses may be taken for concentration credit. Please see the sponsoring department for the time and location of each course.

Comparative Literature
COLT 0610Z Intersections of Race and Culture in the West
Cogut Center for Humanities
HMAN 2971D Caring for the Truth

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GREEK 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 15574 Th 12:00-12:50(16) (S. Kidd)
Fall GREK0100 S01 15574 MWF 11:00-11:50(16) (S. Kidd)

GREEK 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'

GREEK 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 S01 24563 MWF 11:00-11:50(04) 'To Be Arranged'

GREEK 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, ÊµµÇæ and its role in personal relationships, education, and even politics.
Fall GREK0300 S01 15668 MWF 10:00-10:50(14) (A. Pires)

GREEK 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'

GREEK 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 GREK1050G S01 15827 TTh 10:30-11:50(13) (A. Scafuro)

GREEK 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 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 Xenexes and Themistokles serve as an appetizer for the “debase” 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)

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

GREEK 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)

GREEK 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)

GREEK 1110D. Plato: Symposium.
Readings in Greek Plato’s Symposium, his beautiful dialogue about love and philosophy.
Spr GREK1110C S01 24579 TTh 2:30-3:50(11) (M. Gill)

GREEK 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 15686 TTh 1:00-2:20(10) (P. Nieto Hernandez)

GREEK 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)

GREEK 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.

GREEK 2100F. The Twilight of Classical Athens.
Why did Athens fall to Macedon? How did the citizens prepare—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. Hankin)

GREEK 2150. Plato’s Theaetetus.
See PHIL 2150I for course description.
Fall GREK2150 S01 15683 T 6:40-8:10PM(05) (M. Gall)

GREEK 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'

GREEK 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.

GREEK 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 15699 Th 12:00-12:50(14) (D. Janzen)
Fall LATN0100 S01 15699 MWF 10:00-10:50(14) (D. Janzen)

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 15663 MWF 9:00-9:50(01) (G. Gianni)

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 1110A. Apuleius.
No description available. WRIT
Spr LATN1110A S01 25896 TTh 10:30-11:50(09) (S. Eccleston)

LATN 1110E. Comedy.
No description available.
Fall LATN1110E 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. Debrohun)

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 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 allusivity 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) (J. Reed)

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(12) (E. Amanatidou)
MGKR 0200. Introduction to Modern Greek
A continuation of MGKR 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 MGKR0200 S01 24568 MTWTh 12:00-12:50(05) (E. Amanatidou)

MGKR 0300. Intermediate Modern Greek
Develops linguistic and cultural competence and may be taken by anyone who has completed MGKR 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 MGKR0300 S01 15667 TTh 9:00-10:20(08) (E. Amanatidou)

MGKR 0500. 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 MGKR0500 S01 15728 Arranged (E. Amanatidou)

MGKR 0600. Advanced Modern Greek
A continuation of MGKR 0500. Students who have not taken the previous sequence may take a placement test, after consultation with the instructor. The course aims to promote range, accuracy and fluency and enable students to develop ease and spontaneity with the language. Authentic materials drawn from a range of sources inform the content of the course and include films, literature, media, testimonies, music and internet based sources. The development of transcultural competence will be an essential component of the course.
Spr MGKR0600 S01 24581 Arranged (E. Amanatidou)

MGKR 1220. Decolonizing Classical Antiquity: White Nationalism, Colonialism, and Ancient Material Heritage
Why do the material remnants of classical antiquity still attract public attention and exercise symbolic power? Why have such monuments been “used” by authorities and diverse social groups in the service of often totalitarian agendas? What are the cases where these monuments operate as weapons for resistance? How has colonial, racial, and national modernity shaped the way we understand and experience the materiality of the classical? Finally, how can we decolonise classical antiquity? We will use a variety of global case studies, including modern Greece and Europe, and a variety of sources, from ethnographically derived performances to digital culture.
Fall MGKR1220 S01 17152 TTh 2:30-3:50(03) (Y. Hamilakis)

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

MGKR 2200. Modern Greek for Classicists and Archaeologists
This graduate level course promotes the acquisition and further refinement of the necessary translingual and transcultural skills to prepare students in the fields of Classics and Archaeology to carry out research in Greece and Cyprus. In addition, it involves training in linguistic skills that will enable students to study closely a range of texts of relevance to these disciplines. Primary emphasis will be on the development of reading, oral and aural skills using a variety of text and web based materials, of discipline specific content but also in professional and other communicative contexts of cultural currency.
Fall MGKR2200 S01 17276 Arranged (E. Amanatidou)

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 MTThF 12:00-12:50(12) (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 Bhāgavad Gītā and the beginning of the classic story of Nala and Damayantī from the Mahābhārata. Prerequisite: SANS 0100.
Spr SANS0200 S01 24569 MTThF 12:00-12:50(05) (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, Dharmasāstrās, 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)

SANS 170. Independent Study - Special Topics

SANS 1900. Conference: Especially for Honors Students
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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Cognitive, Linguistic and Psychological Sciences

This course will provide an interdisciplinary approach to the science of the mind through lenses 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 word 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 24935 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)

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 0100, CLPS 0020 or NEUR 0100; 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 MW 8:30-9:50(01) 'To Be Arranged'

CLPS 0220. Making Decisions.
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 CLPS0220 S01 16158 TTh 10:30-11:50(13) (S. Sloman)

CLPS 0300. Introduction to Linguistics.
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.
Fall CLPS0300 S01 16704 TTh 1:00-2:20(10) (U. Cohen Priva)

CLPS 0400. Cognitive Neuroscience.
This course focuses 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 neuroscientific experiments with animals and humans.
Fall CLPS0400 S01 16703 TTh 6:40-8:00PM(05) (T. Watanabe)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 CLPS0800 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 25094 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)

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 this 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; biological rhythms; pharmacological 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 flipped course is for undergraduate and beginning graduate students of psychology, cognitive neuroscience, and biology who are interested in biological research on memory. There are three parts: 1) the genesis of modern research on memory, 2) the hippocampus and beyond, and 3) multiple brain memory systems. The course is designed to be accessible to students in a variety of disciplines, but requires background in psychology, cognitive science, or neuroscience. Class will include online lectures, writing assignments, reading primary research articles, and presenting research articles. Prerequisite: CLPS 0010, CLPS 0020, CLPS 0040, CLPS 0200, or NEUR 0010.
Fall CLPS1150 S01 16152 TTh 1:00-2:20(10) (R. Burwell)

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 0900). Enrollment limited to 12; not open to first year students.
Fall CLPS1191 S01 16166 M 1:00-1:50(06) (R. Colwill)

A laboratory course on the prediction, control, and explanation of the behavior of animals in simple environments. Prerequisite: CLPS 0900 (PSYC/COGS 0900).
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.
Spr CLPS1193 S01 24940 TTh 3:00-5:50(11) (K. Bath)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 K-12 learners and teachers, but with some extensions to college. Pre-Requisites: At least one CLPS course at the 1000-level or above or permission of the instructor.
Spr CLPS1271 S01 25526 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).
Fall 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.
Spr CLPS1360 S01 24945 TTh 1:00-2:20(10) (U. Cohen Priva)

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 9:00-9:50(02) (C. Sanker)

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 psychology.
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 Priva)

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. Appropriate for 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 address 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 neuropahtology or aging. Enrollment limited to 20. Not open to first year students.

CLPS 1420. Cognitive Neuropsychology. This seminar will explore the effects of brain damage on cognitive function. 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. Pre Requisites: CLPS0040 or CLPS0200 or CLPS0400. CLPS0900 is strongly recommended. WRIT

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 affect/emotion; how affective processes shape cognition and action; 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 focus 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.

CLPS 1500. Perception and Action. One of the main purposes of encoding visual information is to perform visual-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 visual-motor behavior can provide a useful tool to study a wide range of conscious and unconscious cognitive processes including the current focus 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.

CLPS 1520. 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.

CLPS 1560. Visually-Guided Action and Cognitive Processes. One of the main purposes of encoding visual information is to perform visually-guided actions to directly interact with the external world.

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 outstanding 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.

CLPS 1580E. Perception, Attention, and Consciousness. This seminar will examine how recent neuroscientific research on perception, attention, and consciousness relates to fundamental questions of moral causation, the nature of free will, and high-level decision-making. 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.

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.

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.
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. 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(07) (J. Wright)

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. Standardized 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 20.

Spr CLPS1770 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 man-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 CLPS1710 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 competing 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 T 4:00-6:30(17) (O. FeldmanHall)

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.

Fall CLPS1783 S01 17550 M 3:00-5:30(15) (E. Amit)

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)

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.

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 concentrations 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 16893 MWF 2:00-2:50(07) (J. Morgan)

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 2002. Core Topics in Cognitive and Psychological Sciences II.
An advanced overview of fundamental issues in philosophy of cognitive science, higher-level cognition (concepts, similarity, reasoning, inference, judgment, and decision-making), higher-level language (syntax, semantics, and pragmatics), cognitive development, and social cognition. Domains will be introduced by classic readings and then followed up discussion on modern and contemporary issues in the seminar portion. All topics will be connected thoroughly by common themes.

Spr CLPS2002 S01 25838 TTh 10:30-11:50(11) (J. Krueger)

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.

Spring 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'
Spring 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'
Spring CLPS2990 S01 23989 Arranged 'To Be Arranged'

Humanities

What is a fake? Are "fake" and "authentic" absolute and antithetical categories? Who gets to decide what is authentic? Greek statues, Chinese bronzes, Maya glyphs—what gets faked and why? Have fakes always existed? Galileo’s moons, a centaur’s skeleton, Buddhas bearing swastikas—are all fakes the same? If not, how are they different? Why do people make fakes? Who wins? Who loses? This course revolves around the history of the inauthentic through a diachronic exploration of art objects and other forms of material culture. We will range widely in time and space, focusing primarily on the pre-modern.

Fall HMAN0900B S02 17086 W 3:00-5:30(17) (F. Rojas Silva)

HMAN 1971S. Introduction to iPhone/iPad Moviemaking Using 3-D and 360 VR Comparisons.
Mobile Devices are democratizing movie-making by lowering barriers to entry, enabling students to become full-fledged members of the film industry virtually overnight. This pioneering course provides the basic tools for students to create and distribute no- and low-budget live-action motion pictures with professional production values utilizing only their personal smartphones. Students will acquire the skills to plan, capture and edit short motion pictures through hands-on instruction and experimentation with low-cost accessories, including selfie-sticks, lens adapters, directional microphones and iPhone apps like Filmic Pro, Vizzywig and iMovie. Limited to junior, senior and graduate students.

Fall HMAN1971S S01 17043 T 4:00-6:30(09) (T. Bogosian)

HMAN 1972N. The Indian Ocean World (HIST 1979K).
Interested students must register for HIST 1979K.
Fall HMAN1972N S01 17324 Arranged 'To Be Arranged'

HMAN 1972W. Rhythm and Resistance (AFRI 1050V).
Interested students must register for AFRI 1050V.
Fall HMAN1972W S01 17325 Arranged 'To Be Arranged'

Seminar on the whole of Kubrick’s oeuvre as an artist: his feature films, his documentaries, and his photography for Look magazine. We’ll start with his sci-fi masterpiece 2001, and then take up Kubrick’s early noirs (Day of the Fight; Killer’s Kiss; The Killing); his sex films ( Lolita; A Clockwork Orange; Eyes Wide Shut); and his war films (Paths of Glory; Dr. Strangelove; Full Metal Jacket). Topics include: film adaptation (most of Kubrick’s films are derived from novels); film genre; men and masculinity in extremes; technophilia and technophobia; Kubrick’s reputed misogyny and misanthropy; the aesthetics of violence; and sex on film.

Fall HMAN1972X S01 16955 Th 4:00-6:30(04) (R. Rambuss)

The European colonial empires and their successor states in the Americas all developed bodies of law concerned with the indigenous peoples who preceded them. In the United States, this body of law is generally still known as “American Indian Law” or, more recently, “Federal Indian Law.” It emerged out of colonial-era juristic thinking and was adapted and transformed after the U.S. gained independence from Britain. This seminar will study both the history and structure of this body of law. It will also seek to uncover the ways the technical legal materials embody deep-rooted cultural presuppositions about indigenous peoples.

Fall HMAN1972Y S01 17106 TTh 10:00-11:20(08) (R. Rambuss)

HMAN 1973A. Race, Sexuality, and Mental Disability History (AFRI 1060Z).
Interested students must register for AFRI 1060Z.
Fall HMAN1973A S01 17539 Arranged 'To Be Arranged'

Interested students must register for POLS 1824N.
Fall HMAN1973B S01 17543 Arranged 'To Be Arranged'


HMAN 2400A. 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 theme 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 HMAN2400A S01 25781 Th 1:00-3:30(11) (A. Anderson)

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 modern novel, melodramatic film, and the literary essay.

Fall HMAN2400B S01 17582 Th 12:00-2:30(10) (J. Khalil)

Interested students must register for MCM 2100R.
Fall HMAN2400D S01 16873 Arranged 'To Be Arranged'

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

**HMAN 2400E. What Was Europe?**  
“What Was Europe?” focuses on the “crisis of the European spirit” in 20th-century thought. In this course we will look at the origins of Europe and its aftermath in the literary study, philosophy, and political theory.  
Fall HMAN2400ES01 17119 F 3:00-5:30(11) (K. McLaughlin)

**HMAN 2400F. Scales of Historiography.**  
This seminar explores the construction of new geographies and timescales of historical narration during the late nineteenth- and twentieth-century periods of social upheaval (displacement, colonialism, war). We will explore debates over cosmological, geological, and ecological timescales and affective histories across a set of genres and disciplines (e.g., genealogy, Classics, religion, geohistory). Some emphasis will be on China, Taiwan and Europe, but with an attention to how they were related to other parts of Asia, Africa, and the Americas.  
Spr HMAN2400FS01 25780 M 12:30-3:00(07) (T. Chin)

**HMAN 2970A. Politics Beyond the Human.**  
Investigates the politics of the relationship between people and the earth; examines the environmental consequences of this relationship as it currently exists, as well as its impact on human justice and freedom; and explores alternative political imaginaries and institutional forms that include the non-human and evaluates their implications for sustainability, justice, and freedom. In considering the political relationship between human beings and the earth, we examine (and problematize) core political concepts including justice, freedom, agency, sovereignty, democracy, liberalism, rights, representation, and the political. Readings reflect a great diversity of normative commitments and methodological approaches.  
Fall HMAN2970AS01 17156 W 9:30-12:00(01) (S. Krause)

**HMAN 2971B. Kant and Mendelssohn (PHIL 2080J).**  
Interested students must register for PHIL 2080J.  
Spr HMAN2971BS01 25685 Arranged 'To Be Arranged'

**HMAN 2971C. Decolonial Methodology: Pedagogy for a New Era of Dissent and Resistance.**  
The seminar will focus on the ways to develop and nurture a decolonial methodology that is intersectional, anti-racist, anti-capitalist and anti-imperialist. The aim is to produce a space of trust that allows debating hard questions and challenging our own assumptions, and encouraging collective thinking and cooperative learning.  
Fall HMAN2971CS01 17315 W 3:00-5:30(17) "To Be Arranged"

**HMAN 2971D. Caring for the Truth.**  
The seminar offers a close reading of two series of lectures Michel Foucault gave in 1983-1984. Turning to classical Greek authors Foucault sought to understand how certain forms of care for the truth became central to regimes of power and forms of government, but also to regimes of individuals’ self-formation. Proceeding along three axes we will follow the main themes in Foucault’s text, read independently some of his primary texts, and use his interpretive analytics to probe into “the truth wars” of the present, reflecting on the way we are – or wish to be – positioned in relation to them.  
Fall HMAN2971DS01 17204 W 3:00-5:30(17) (A. Ophir)

**Comparative Literature**

**COLT 0510F. Fidel Castro and Che Guevara, The Men and the Myths.**  
The 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 COLT0510FS01 15722 TTh 1:00-2:20(10) (E. Whitfield)

**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 Shepheardest Calender, Cervantes, Don Quixote.  
Spr COLT0510PS01 24693 TTh 10:30-11:50(09) (S. Foley)

**COLT 0610D. Rites of Passage.**  
Examines a seemingly universal theme-coming of age-by focusing on texts from disparate periods and cultures. Proposes that notions of “growing up” are profoundly infected 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 Chrétién de Troyes, Quevedo, Prévost, Balzac, Brontë, Twain, Faulkner, Vesaas, Rhys, Satrapi and Foer. Enrollment limited to 20 first year students. FYS  
Spr COLT0610DS01 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 1960’s. 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 Ruflo, and the indigenous Nican Mopohua on the Virgin of Guadalupe. All in English. No prerequisites. WRIT.  
Fall COLT0610ES01 15813 TTh 2:30-5:30(03) (S. Merrim)

**COLT 0610Y. Women’s Writing in the Arab World.**  
This course examines Arab women’s writing through the lenses of both Arab and Western feminist theory and criticism. Beginning with a survey of pre-modern female literary personae in Arabic (the elegist, 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, Adania Shibli. Films by Moufida Tlatli, Annemarie Jacir. DPLL  
Fall COLT0610YS01 16691 MWF 2:00-5:00(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 COLT0610SZ01 16082 F 3:00-5:30(11) (A. 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 experimentations 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 COLT0711HS01 24819 TTh 9:00-10:20(01) (E. Whitfield)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 stories (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 COLT0810H 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 Entertainments 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 COLT0810I S01 24740 MWF 1:00-1:50(08) (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 0811Z. Paradise, Periphery, Prison?: The Island in the Western Imaginary.
Paradise, periphery, or prison? The representation of the island has been described as imaginary and not actual, mythological and not geographical. Examines the fascination with islands in the western cultural imaginary. Selective readings from literature, film and historical texts focus on the ways in which island spaces have been represented in diverse social, national, imperial contexts as well as the effect of such projections on the native islanders, their visitors and often subjugators. Authors may include Homer, Plato, Marco Polo, Mandeville, Darwin, Defoe, Tournier, Kincaid, Kafka, Durrell, Seferis; theoretical works drawn from critical geography, postcolonialism, and the field of island studies.
Spr COLT0811Z S01 25904 MWF 2:00-2:50(07) (V. Calotychos)

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 approprable 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 renditions 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 writing their final work. DPLL
Spr COLT0812B S01 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, belllettristic 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 COLT1310E S01 16692 W 3:00-5:30(17) (E. Muhanna)

COLT 1411C. Shakespearean Comedy (ENGL 1361H).
Interested students must register for ENGL 1361H. Fall COLT1411C S01 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 irreverence. 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 COLT1420F S01 24775 TTh 2:30-3:50(11) (S. Merrim)

COLT 1420T. The Fiction of Relationship.
Examines 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 Laclos, Melville, Bronté, Kafka, Woolf, Faulkner, Borges, Burroughs, Vesaas, Morrison, and Coetzee.
Fall COLT1420T S01 15645 TTh 10:30-11:50(13) (A. Weinstein)

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 COLT1421V S01 15654 MWF 12:00-12:50(12) (M. Clayton)

COLT 1422F. Short Forms: Major Works in a Minor Key (HISP 1330Q).
Interested students must register for HISP 1330Q.
Spr COLT1422F S01 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 COLT1430D S01 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 (turfah) and creative innovation (ibda’); gender and genre. All readings in Arabic; at least four years Arabic language study (or equivalent) required for enrollment. Poems by Shawqi, Mutran, Abu Shadi, Jibran, Abu Madi, al-Sayyab, al-Mala’ikah, al-Bayati, ‘Abd al-Sabur, Sayigh, Ziyad, Tuqan, Darwish, Hawi, al-Khal, Adunis, Qabbani, al-Maghut, Mersal, and others. Pre Requisites: At least three years of Arabic language study.
Spr COLT1431B S01 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 COLT1431C S01 16706 MWF 10:00-11:50(14) (V. Calotychos)
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. Calotychos)

COLT 1440Q. Stranger Things: The German Novella (GRMN 1440X). Interested students must register for GRMN 1440X.

Fall COLT1440QS01 17209 Arranged 'To Be Arranged'

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 COLT1710AS01 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 COLT1710CS01 24811 W 3:00-5:30(14) (S. Nakayasu)

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, Díaz, García-Márquez, Allende, Dantical and Gordiner. Theoretical texts by White, Capra, Benjamin, Ricoeur, and Chartier. 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 COLT1810GS01 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 COLT1813KS01 16698 TTh 10:30-11:50(13) (E. Muhanna)

COLT 1813N. Early Modern Women’s Writing. Interested in women writers, feminism? If so, if 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 COLT1813NS01 25386 F 3:00-5:30(15) (S. Merrim)

COLT 1814D. East-West Encounters: Politics and Fictions of Orientalism. 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 Shahrzad and the theme of the harem. We will study some modern versions of the Arabian Nights.

Fall COLT1814DS01 16705 M 3:00-5:30(15) (O. Mostefai)

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 erotics; 3. by taking seriously Walter Benjamin’s paradoxical intuition that one should “read what was never written”.

Fall COLT1814US01 15812 TTh 6:40-8:00PM(05) (P. Szendy)

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 COLT1814XS01 24826 TTh 1:00-2:20(10) (A. Weinstein)

COLT 1814Y. Posthumanism and the Ends of Man. Have we ever been human? As mechanical implants, virtual extensions, and organic interdependencies challenge self-contained conceptualizations of human being, posthumanist theories invite us to rethink our self-understanding. In this course, we will explore the human as a fluid category in perpetual motion. Focusing on female and gender nonconforming bodies, which have traditionally been situated at the limits of the human, we will analyze the critical potential of hybrids, androids, and cyborgs. Readings among others by Ovid, the Brothers Grimm, E.T.A. Hoffmann, Han Kang, and Octavia Butler; films will include Metropolis, Mad Max: Fury Road, and the series West World.

Fall COLT1814YS01 17130 MWF 9:00-9:50(01) (N. Lozinski-Veach)

COLT 1814Z. Alexander to Cleopatra: Greek Literature and Culture (CLAS 1120Y). Interested students must register for CLAS 1120Y.

Fall COLT1814ZS01 16870 Arranged 'To Be Arranged'

COLT 1815. Kafka and the Philosophers (GRMN 1892). Interested students must register for GRMN 1892.

Spr COLT 1815S01 25912 Arranged 'To Be Arranged'

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

COLT 1980. Group Independent Study. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

COLT 2450. Exchange Scholar Program.

Fall COLT2450S01 14961 Arranged 'To Be Arranged'

Spr COLT2450S01 23990 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
interested students must register for MCM 2100R.

**COLT 2540J. Proseminar in Comparative Literature**

Designed for both Comparative Literature graduate students and the Comp-Lit-curious, this seminar will explore numerous approaches to and theories of Comparative Literature, together with a few key texts. Through collaborative discussions and guest sessions led by faculty in the department and beyond, we will investigate the many practices encompassed in this heterogenous discipline, as well as how it interacts with others (history, philosophy, cultural and area studies, etc.). We'll pay special attention to recent debates around world literature, planetarity, and their discontents. For the final seminar paper, students will be asked to produce a manifest for a "new" comparative literature.

**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.

**COLT 2650S. Thinking Tradition: Heidegger, Arendt, Adorno (GRMN 2661K).**

Interested students must register for GRMN 2661K.

**COLT 2720D. Translation: Theory and Practice.**

This seminar will address the theory and practice of translation, and their place in the Humanities. Essays by translators, authors and scholars will be drawn from a range of languages and contexts, as will literary and historical texts. Each participating student will work on a substantial translation project over the course of the semester. The seminar is open only to graduate students; a strong knowledge of at least one language other than English is required.

**COLT 2821Q. Not With The Master's Tools: Freedom, Enslavement, Emancipation, and Reparations.**

Focusing on the era of reconstruction and re-reading texts of various genres and orientations including diaries, novels, Freedmen's bureau records, enslaved petitions, newspapers, architectural 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.

**COLT 2830M. Potential History of Photography: Collaboration (MCM 2100R).**

Interested students must register for MCM 2100R.

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**For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).**
### 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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### CSCI 0100. Data Fluency for All.
This course is intended to introduce Brown students to computational techniques that data scientists use to tell stories. Data fluency encompasses both data literacy, the basics of statistics and machine learning, and data communication, which relies heavily on principles of design. Students will gain hands on experience using statistical tools such as ‘R’ to analyze real world data sets, and ‘ggplot’ to visualize them. Sample application domains include just about every field, since the only requirement is data, which there which almost always are (e.g., the complete works of Shakespeare is a sample data set).

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### CSCI 0130. 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 assignments, readings, and design labs. CSCI 0130 is the same lecture, labs, and readings as CSCI 1300 but half of the assignments will be different (CSCI 1300 will have assignments with computer science prerequisites).

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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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### CSCI 0160. Introduction to Algorithms and Data Structures.
Introduces fundamental techniques for problem solving by computer that are relevant to most areas of computer science, both theoretical and applied. Algorithms and data structures for sorting, searching, graph problems, and geometric problems are covered. Programming assignments conform with the object-oriented methodology introduced in CSCI 0150. Prerequisite: CSCI 0150 or written permission.

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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 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, analysis, 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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### CSCI 0180. Computer Science: An Integrated Introduction.
A continuation of CSCI 0170. Students learn to program in Java while continuing to develop their algorithmic and analytic skills. Emphasis is placed on object-oriented design, imperative programming, and the implementation and use of data structures. Examples are drawn from such areas as databases, strategy games, web programming, graphical user interfaces, route finding, and data compression. Lab work done with the assistance of TAs. Prerequisite: CSCI 0170 or CSCI 0190.

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### 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 a 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.

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### CSCI 0220. Introduction to Discrete Structures and Probability.
Seeks to place on solid foundations the most common structures of computer science, to illustrate proof techniques, to provide the background for an introductory course in computational theory, and to introduce basic concepts of probability theory. Introduces Boolean algebras, logic, set theory, elements of algebraic structures, graph theory, combinatorics, and probability. No prerequisites.

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### CSCI 0320. Introduction to Software Engineering.
Techniques for designing, building, and maintaining large, scalable, and reusable systems. Will cover advanced programming techniques using Java and JavaScript. Course assignments will familiarize students with software testing, relational databases, concurrency techniques such as threads, and software engineering tools like git, profilers, and debuggers. A major component of the course will be a group software project of your own design.

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 CSC10310 01 15883 08:00A-9:50A(08) (S. Reiss)

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, (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 CSC1050 01 15889 03:00A-4:20P(17) (P. Klein)

CSCI 1010. Theory of Computation.
The course introduces basic models of computation including languages, finite-state automata and Turing machines. Proves fundamental limits on computation (incomputability, the halting problem). Provides the tools to compare the hardness of computational problems (reductions). Introduces computational complexity classes (P, NP, PSPACE and others). Prerequisite: CSCI 0220 or 1450.
Fall CSC11010 01 17022 01:00A-2:20P(10) (J. Savage)

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 CSC1230 01 15900 10:30A-11:50A(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 CSC1234 01 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.
Please see course website for application procedure.
Fall CSC1250 01 15894 12:00A-1:50P(12) (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 CSC1260 01 15902 2:30P-3:50P(03) (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 CSC1270 01 15891 03:00A-4:20P(17) (S. Zdonk)

CSCI 1280. Intermediate 3D Computer Animation.
Continues work begun in CSCI 1250 with deeper exploration of technical and artistic aspects of 3D computer animation including more sophisticated shading and lighting methods and character modeling, rigging, animation, and dynamics. After a series of individual exercises, students pursue an independent topic and then, working alone or in pairs, create a polished demonstration. Emphasis is on in-class critique of ongoing work. Prerequisite: CSCI 1250. Students may contact the instructor in December for permission.
Spr CSC1280 01 25751 9:00A-1:50P(04) (B. Meier)

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. There will be assignments, readings, and design labs. CSCI 1300 and CS 0130 share the same lecture, labs, and readings but half of the assignments will be different (CSCI 1300 will have assignments with computer science prerequisites). Website: http://cs.brown.edu/courses/csci1300/.
Fall CSC1300 01 15885 6:40A-8:00P(05) (J. Huang)

This course covers all aspects of web application development, including the initial concept, user-centric design, development methodologies, front and back end development, databases, security, testing, load testing, accessibility, and deployment. There will be a substantial team project. The course is designed for students with a programming background (equiv CSCI 0320/CSCI 0330) who want to learn how to build web applications, and for students with a background in web design, including HTML and Javascript, who are interested in learning how to extend design techniques to incorporate the technologies needed in modern web applications. Project teams will consist of students with both backgrounds.
Spr CSC1320 01 25752 10:00A-11:50A(05) (S. Reiss)

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 CSC1330 01 15892 TTh 10:00A-11:50A(14) (L. Laidlaw)

CSCI 1340. Distributed Computer Systems.
Explores the fundamental principles and practice underlying networked information systems, first we cover basic distributed computing mechanisms (e.g., naming, replication, security, etc.) and enabling middleware technologies. We then discuss how these mechanisms and technologies fit together to realize distributed databases and file systems, web-based and mobile information systems. Prerequisite: CSCI 0320 or CSCI 0330.
Spr CSC1340 01 25753 TTh 10:30A-11:50A(09) (T. Doepner)

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 CSC1410 01 15891 TTh 1:00A-2:20P(10) (G. Konidaris)
We explore the theory and practice of statistical machine learning, focusing on computational methods for supervised and unsupervised data analysis. Specific topics include Bayesian and maximum likelihood parameter estimation, regularization and sparsity-promoting priors, kernel methods, the expectation maximization algorithm, and models for data with temporal or hierarchical structure. Applications to regression, categorization, clustering, and dimensionality reduction problems are illustrated by examples from vision, language, bioinformatics, and information retrieval.
Spr CSCI1420 S01 25754 TTh 2:30-3:50(11) (M. Littman)

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)

The application of computational methods to problems in natural-language processing. In particular we examine techniques due to recent advances in deep learning: word embeddings, recurrent neural networks (e.g., LSTMs), sequence-to-sequence models, and generative adversarial networks (GANs). Programming projects include parsing, machine translation, question answering, and chat-bots. The prerequisite of CS147 (or the equivalent background) is very important.
Fall CSCI1460 S01 25755 MWF 2:00-2:50(07) (E. Charniak)

Deep learning is the name for a particular version of neural networks--a version that emphasizes multiple layers of networks. Deep learning, plus the specialized techniques that it has inspired (e.g. convolutional features and word embeddings) have lead to rapid improvements in many applications such as computer vision, machine translation, and computer Go. This course intends to give students a practical understanding of deep learning as applied in these and other areas. It also teaches the Tensorflow programming language for the expression of deep leaning algorithms. (The primary API for Tensorflow is from Python.)
Fall CSCI1470 S01 16986 MWF 12:00-12:50(12) (E. Charniak)

CSCI 1510. Introduction to Cryptography and Computer Security.
This course studies the tools for guaranteeing safe communication and computation in an adversarial setting. We develop notions of security and give provably secure constructions for such cryptographic objects as cryptosystems, signature schemes and pseudorandom generators. We also review the principles for secure system design. Prerequisites: CSCI 0220 and CSCI 0510.
Spr CSCI1510 S01 25772 TTh 1:00-2:20(10) (A. Lysanskaya)

Randomization and probabilistic techniques play an important role in modern computer science, with applications ranging from combinatorial optimization and machine learning to communications networks and secure protocols. This course introduces the most fundamental probabilistic techniques used in computer science applications, in particular in randomized algorithms, probabilistic analysis of algorithms and machine learning.
Prerequisite: Basic background in probability theory course such as CSCI 1450.
Spr CSCI1550 S01 25756 M 3:00-5:30(13) (E. Upfal)

CSCI 1570. Design and Analysis of Algorithms.
A single algorithmic improvement can have a greater impact on our ability to solve a problem than ten 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)

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 MWF 11:00-11:50(16) (S. Reiss)

CSCI 1620 is a half-credit laboratory course intended to be taken concurrently with CSCI 1660 and provides students with a deeper understanding of the material by doing additional assignments, which include extensions of the 1660's assignments. Instructor permission required.
Spr CSCI1620 S01 25776 Arranged (R. Tamassia)

CSCI 1650. Software Security and Exploitation.
Covers software exploitation techniques and state-of-the-art mechanisms for protecting (vulnerable) software. It begins with a summary of prevalent software defects, typically found in applications written in memory unsafe languages, like C/C++, and proceeds with studying traditional and modern exploitation techniques, ranging from classical code-injection and code-reuse up to the newest goodies (just-in-time code reuse). For the most part, it focuses on defenses against certain vulnerability classes and exploitation methods. Students will learn about the boundaries and effectiveness of virtualization, stack and heap protections, and address space randomization, and analyze advanced exploitation techniques and countermeasures.
Fall CSCI1650 S01 17268 M 3:00-5:30(15) (V. Kemeris)

This course teaches principles of computer security from an applied viewpoint and provides hands-on experience on security threats and countermeasures. Topics include code execution vulnerabilities (buffer overflow, sandboxing, mobile code), malware (trodians, viruses, and worms), access control (users, roles, policies), cryptosystems (hashing, signatures, certificates), network security (firewalls, TLS, intrusion detection, VPN), and human and social issues. Prerequisites: one of CSCI 0160 or CSCI 0180 or CSCI 0190; and CSCI 0330.
Spr CSCI1660 S01 25757 TTh 1:00-2:20(10) (R. Tamassia)

Covers not just the principles of operating systems but the intricacies of how they work. Topics include multithreaded programming, managing threads and interrupts, managing storage, processor scheduling, operating-system structure, virtualization, security, and the design of file systems (both local and distributed). Extensive examples are taken from actual systems, including Linux and Windows. Students are expected to complete both problem sets and programming assignments (in C). Prerequisite: CSCI 0330.
Spr CSCI1670 S01 25760 MWF 2:00-2:50(07) (T. Doepner)

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 1690. Operating Systems Laboratory.
Half-credit course intended to be taken with CSCI 1670. Students individually write a simple operating system in C. Serves to reinforce the concepts learned in 1670 and provides valuable experience in systems programming. Corequisite: CSCI 1670.
Spr CSCI1690 S01 25761 Arranged (T. Doepner)

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 1:00-2:20(10) (M. Herlihy)

CSCI 1800. Cybersecurity and International Relations.
The global Internet shortens distances, makes businesses more efficient and facilitates greater social interaction. At the same time, it exposes vital national resources to exploitation and makes it easier for the international criminal element to prey on innocent Internet users. Cybersecurity is concerned with making the Internet a more secure and trustworthy environment. In this course we study this topic from the technological and policy points of view. The goal is to facilitate communication across the divide that normally characterizes the technological and policy communities. WRIT
Spr CSCI1800 S01 25762 MW 3:00-4:20(14) (J. Savage)

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)

The course is devoted to computational and statistical methods as well as software tools for DNA, RNA, and protein sequence analysis. The focus is on understanding the algorithmic and mathematical foundations of the methods, the design of associated genomics software tools, as well as on their applications. Topics include: sequence alignment, genome assembly, gene prediction, regulatory genomics, and SNP’s variation. The course is open to computer and mathematical sciences students as well as biological and medical students.
Spr CSCI1820 S01 25763 TTh 2:30-3:50(11) (S. Istrail)

CSCI 1900. csciStartup.
In csciStartup, you will incorporate and run a startup. Apply as a team to be part of a prototype class to remove the mystery from starting a company and to focus entirely on a product you’re passionate about. Teams will incorporate, build a product for real customers, advertise their product, and improve it week after week. We’ll spend half our class meetings with individual attention to each group’s progress and how to improve your offerings. Assignments will be designed to apply to any company, with enough flexibility to ensure you’re always working on things that make sense for your business.
Spr CSCI1900 S01 25764 TTh 6:40-8:00PM(18) (J. Jannotti)

The course will focus on proving properties about systems and programs. We will study the distinction between programs and specifications, and check for whether the former obey the latter. We will work with tools that have extensive automation such as model constructors, model checkers, and proof assistants. Problems and projects will apply to real-world systems. Prerequisite: CSCI 0180, CSCI 0190, or CSCI 0190. Preferred but not required: CSCI 0220 and CSCI 0510, or instructor’s permission.
Spr CSCI1950Y S01 25937 MWF 10:00-10:50(03) (T. Nelson)

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=DBvis_j_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(01) (I. Gonsler)

CSCI 1951G. Optimization Methods in Finance.
Optimization plays an important role in financial decisions. Many computational finance problems ranging from asset allocation to risk management, from option pricing to model calibration can be solved efficiently using modern optimization techniques. This course discusses several classes of optimization problems (including linear, quadratic, integer, dynamic, stochastic, conic, and robust programming) encountered in financial models. For each problem class, after introducing the relevant theory and efficient solution methods, we discuss problems of mathematical finance that can be modeled within this problem class. Prerequisites: CSCI 1450 or APMA 1650, and CSCI 1570.
Spr CSCI1951G S01 25936 F 2:00-4:30 (M. Riondato)

CSCI 1951R. Introduction to Robotics.
Each student will learn to program a small quad-rotor helicopter. We will provide each student with their own robot for the duration of the course. The course will cover PID controllers for stable flight, localization with a camera, mapping, and autonomous planning. At the end of the course, the aim is for students to understand the basic concepts of a mobile robot and aerial vehicle.
Fall CSCI1951R S01 17125 TTh 1:00-2:20(10) (S. Tellex)

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.
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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CSCI 2951K. Topics in Collaborative Robotics.
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. Prerequisite: CSCI 1410, 1420, 1460, 1480, or 1950F; or instructor permission.
Spr CSCI2951K S01 25774 TTh 1:00-2:20(10) (S. Tellex)

CSCI 2951O. Foundations of Prescriptive Analytics.
We are undoubtedly in the middle of an Analytics Revolution that enabled turning huge amounts data into insights, and insights into predictions about the future. At its final frontiers, Prescriptive Analytics is aimed at identifying the best possible action to take given the constraints and the objective. To that end, this course provides students with a comprehensive overview of the theory and practice of how to apply Prescriptive Analytics through optimization technology. A wide variety of state-of-the-art techniques are studied including: Boolean Satisfiability, Constraint Programming, Linear Programming, Integer Programming, Local Search Meta-Heuristics, and Large-Scale Optimization. Prerequisite: One of CSCI 0320 or CSCI 0330 and recommended: one of CSCI 0530, CSCI 1570, MATH 0520 or MATH 0540.
Fall CSCI2951O S01 17427 T 4:00-6:30(09) ‘To Be Arranged’

This course investigates the state-of-the-art in software exploitation and defense. Specifically, the course is structured as a seminar where students present research papers to their peers. We will begin with a summary of prevalent software defects, typically found in applications written in memory unsafe languages, and proceed to surveying what we are up against: traditional and modern exploitation techniques, ranging from classical code injection and code reuse up to the newest goodies (JIT-ROP, Blind ROP). For the bulk part, we will focus on the latest advances in protection mechanisms, mitigation techniques, and tools against modern vulnerability classes and exploitation methods.
Spr CSCI2951U S01 25765 M 3:00-5:30(13) (V. Kemerlis)

CSCI 2951W. Creative Artificial Intelligence for Computer Graphics.
How can artificial intelligence help us create visual content? In this seminar course, we will explore how to use tools such as probabilistic graphical models, probabilistic programs, and neural networks to generate content, explore design spaces, and support creativity for 2D and 3D graphics applications. Each week, we will read recent papers from the graphics and AI literatures and discuss their contributions, connections, and limitations. Students will also complete a collaborative, open-ended final project. Throughout, the course will emphasize key academic skills such as critical paper-reading and how to give clear and compelling presentations.
Fall CSCI2951W S01 17127 W 3:00-5:30(17) (R. Ritchie)

CSCI 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.

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 thesis.
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
An integrative seminar designed for concentrators working on senior theses. Others with comparable backgrounds may enroll with written permission. Begins with a review of theoretical and methodological literature on development studies. Written and oral presentations of thesis research will be the central focus of the latter part of the course. Reserved for Development Studies seniors. WRIT
Fall DEVL1980 S01 17198 W 3:00-5:30(17) (P. Lewis)
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.

DEVL 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 DEVL2990 S01 14966 Arranged "To Be Arranged"
Spr DEVL2990 S01 23994 Arranged "To Be Arranged"

DEVL XLIST. Courses of Interest to Concentrators in Development Studies.

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

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 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 course work in CHIN 0200 covers the entire year and is recorded as the final grade for both semesters.
Fall CHIN0100 S01 15218 MWF 9:00-9:50(15) (W. Chen)
Fall CHIN0100 S01 15218 TTh 9:00-10:20(15) (W. Chen)
Fall CHIN0100 S02 15219 MWF 10:00-10:50(15) (W. Chen)
Fall CHIN0100 S02 15219 TTh 10:30-11:50(15) (W. Chen)
Fall CHIN0100 S03 15220 MWF 1:00-1:50(15) (W. Chen)
Fall CHIN0100 S03 15220 TTh 1:00-2:20(15) (W. Chen)
Fall CHIN0100 S04 15221 MWF 2:00-2:50(15) (W. Chen)
Fall CHIN0100 S04 15221 TTh 2:30-3:30(15) (W. Chen)

CHIN 0200. Basic Chinese.
A year-long introduction to Standard Chinese (Mandarin). Speaking, reading, writing, and grammar. Five classroom meetings weekly. This is the second half of a year-long course. Students must have taken CHIN 0100 to receive credit for this course. The final grade for this course will become the final grade for CHIN 0100. If CHIN 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 CHIN0200 S01 24216 MWF 9:00-9:50(16) (W. Chen)
Spr CHIN0200 S01 24216 TTh 9:00-10:20(16) (W. Chen)
Spr CHIN0200 S02 24276 MWF 10:00-10:50(16) (W. Chen)
Spr CHIN0200 S02 24276 TTh 10:30-11:50(16) (W. Chen)
Spr CHIN0200 S03 24277 MWF 1:00-1:50(16) (W. Chen)
Spr CHIN0200 S03 24277 TTh 1:00-2:20(16) (W. Chen)
Spr CHIN0200 S04 24278 MWF 2:00-2:50(16) (W. Chen)
Spr CHIN0200 S04 24278 TTh 2:30-3:30(16) (W. Chen)

CHIN 0300. Intermediate Chinese.
An intermediate course in Standard Chinese designed to further communicative competence and to develop reading and writing skills. Five classroom meetings weekly. Prerequisite: CHIN 0200 or permission of instructor.
Fall CHIN0300 S01 15222 MWF 12:00-12:50(15) (J. Huang Hsieh)
Fall CHIN0300 S01 15222 TTh 12:00-12:50(15) (J. Huang Hsieh)
Fall CHIN0300 S02 15223 MWF 1:00-1:50(15) (J. Huang Hsieh)
Fall CHIN0300 S02 15223 TTh 1:00-2:20(15) (J. Huang Hsieh)
Fall CHIN0300 S03 15224 MWF 2:00-2:50(15) (J. Huang Hsieh)
Fall CHIN0300 S03 15224 TTh 2:30-3:30(15) (J. Huang Hsieh)

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.
Fall CHIN0350 S01 15601 TTh 12:00-12:50(12) (W. Chen)
Fall CHIN0350 S01 15601 MWF 12:00-12:50(12) (W. Chen)

CHIN 0400. Intermediate Chinese.
An intermediate course in Standard Chinese designed to further communicative competence and to develop reading and writing skills. Five classroom meetings weekly. Prerequisite: CHIN 0300 or permission of instructor.
Spr CHIN0400 S01 24279 MWF 12:00-12:50(15) (J. Huang Hsieh)
Spr CHIN0400 S01 24279 TTh 12:00-12:50(15) (J. Huang Hsieh)
Spr CHIN0400 S02 24280 MWF 1:00-1:50(15) (J. Huang Hsieh)
Spr CHIN0400 S02 24280 TTh 1:00-2:20(15) (J. Huang Hsieh)
Spr CHIN0400 S03 24281 MWF 2:00-2:50(15) (J. Huang Hsieh)
Spr CHIN0400 S03 24281 TTh 2:30-3:30(15) (J. Huang Hsieh)

CHIN 0450. Advanced Chinese for Heritage Learners.
This course is primarily designed for Chinese heritage students who have successfully completed CHIN 0350. If you have not taken CHIN0350, please contact the instructor for a proficiency evaluation. Upon completing this course, you can take CHIN 0700 or equivalent, i.e. courses that have a prerequisite of CHIN 0600. This is an advanced-level course offering comprehensive work on all four language skills, with a focus on developing your ability to use sophisticated grammatical structures, vocabulary, and improving your reading and speaking skills. Materials used in this course will include a textbook, supplementary articles, and video clips.
Spr CHIN0450 S01 24812 TTh 12:00-12:50(05) (L. Hu)
Spr CHIN0450 S01 24812 MWF 12:00-12:50(05) (L. Hu)

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.
Fall CHIN0500 S01 15319 MWF 9:00-9:50(04) (Y. Wang)
Fall CHIN0500 S01 15319 TTh 9:00-10:20(04) (Y. Wang)
Fall CHIN0500 S02 15320 TTh 10:30-11:50(04) (Y. Wang)
Fall CHIN0500 S02 15320 MWF 11:00-12:00(04) (Y. Wang)
Fall CHIN0500 S03 15321 MWF 12:00-12:50(04) (Y. Wang)
Fall CHIN0500 S03 15321 TTh 12:00-12:50(04) (Y. Wang)

CHIN 0600. 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 0500 or permission of instructor.
Spr CHIN0600 S01 24228 MWF 9:00-9:50(02) (Y. Wang)
Spr CHIN0600 S01 24228 TTh 9:00-10:20(02) (Y. Wang)
Spr CHIN0600 S02 24283 TTh 10:30-11:50(04) (Y. Wang)
Spr CHIN0600 S02 24283 MWF 11:00-12:00(04) (Y. Wang)
Spr CHIN0600 S03 24284 MWF 12:00-12:50(05) (Y. Wang)
Spr CHIN0600 S03 24284 TTh 12:00-12:50(05) (Y. Wang)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CHIN 0700. Advanced Modern Chinese II.
This course is designed to enhance the Chinese proficiency of those who have taken Advanced Modern Chinese I (CHIN 0600) or the equivalent. All four language skills are emphasized through selected authentic materials. At the end of the year, students should be able to express their ideas with sophistication and nuance. Drills on complex sentence patterns will be conducted when necessary. Prerequisite: CHIN 0600 or permission of instructor.

Fall CHIN0700 S01 15226 TTh 10:30-11:50(14) (L. Hu)
Fall CHIN0700 S01 15226 MWF 10:00-10:50(14) (L. Hu)

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)

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: CHIN800 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 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 Arranged 'To Be Arranged'

East Asian Studies

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, shoji print culture, and East Asian activism.

Fall EAST0350 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 inflected 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)

Korea has a long and rich history that often goes underappreciated in the U.S. and other parts of the world. At the same time, studying Korea provides a unique vantage point for understanding major processes in East Asia and the world, both in the past and the present. The aim of this introductory course is to use illuminating aspects of the Korean historical experience to set the path for an educational journey that encompasses not only learning about the Korean past, but also expanding our ability to approach cultural histories, as well as national cultures in general.

Fall EAST0530 S01 17082 MWF 2:00-5:00(07) (H. Kim)

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, multithetic 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 East Asian activism. 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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 15239 MWF 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 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 printing 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
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 1280. Introduction to Japanese Cinema.
This course examines the cinema of Japan, from the 1930s to the present. Students will learn to "read" film as a visual text through a study of the basics of film editing and shot composition and will gain an understanding of cinema as art form, commercial product, and ideological tool through selected articles on film theory and published analyses of the assigned films. In addition, we will place the films within their specific context through a study of Japanese history, religious thought, and cultural trends.
Fall EAST1280 S01 17238 W 3:00-5:30(17) "To Be Arranged"

EAST 1500. Returnees in China's Modernization.
This course examines the impact on contemporary China of returnees, people who have 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 now century and a half long period of modernization.
Spr EAST1500 S01 24288 T 4:00-6:30(16) (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.
Fall EAST1950W S01 15240 Th 4:00-6:30(04) (S. Perry)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 multiethic 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 encyclopedia, carpenters’ spell, Confucian engineers’ autofiction, novel medicine, and female scholars. Prerequisites: None. DPLL.

EAST 1951C. Picturing Korea: History and Memory in South Korean Cinema.
South Korean films have recently shown a thematic preoccupation with the nation’s tumultuous history by presenting diverse stories of past event and experience. They have also rendered different ways to address the issues related to important social developments and cultural phenomena. The aim of this seminar is to think about cinema’s role as a medium for visual storytelling and as a site for producing historical imaginations. Prior coursework on film and media and/or the history of East Asia is required, and students are expected to have a firm grounding in the methods of critical reading, textual analysis, and scholarly argumentation. Fall EAST1951C S01 17083 T 4:00-6:30(09) (H. Kim)

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. Fall EAST2450 S01 17571 Arranged ‘To Be Arranged’

EAST XLIST. Courses of Interest to Concentrators.
Fall 2017
East Asian Studies is a highly interdisciplinary concentration. The following courses in other departments can be taken for concentration credit. Please check the listing of the appropriate department for the time and location of each course.

Modern Culture and Media
MCM 1203U East Asian Cinemas in a Global Frame
Religious Studies
RELS 0080 Japan: Nature, Ritual and the Arts

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 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.

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.

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.

See Intermediate Japanese (JAPN 0300) for course description. Prerequisite: JAPN 0300 or equivalent. Enrollment limited to 18.

JAPN 0500. Advanced Japanese I.
Continued practice in reading, writing, and speaking. Emphasizes the development of reading proficiency and speaking in cultural contexts. Students need actual articles and practice from Japanese newspapers. Course includes translations, with writing and discussion in Japanese. Films and video tapes are shown as supplementary materials. Prerequisite: JAPN 0400 or equivalent.

JAPN 0600. Advanced Japanese I.
See Advanced Japanese I (JAPN 0500) for course description.

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.

JAPN 0800. Advanced Japanese II.
See Advanced Japanese II (JAPN 0700) for course description.
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, Akutagawa Ryunosuke, Yoshia Nobuko, Kubokawa Ineko, Mishima Yukiko and Murakami Haruki, as well as ethnic Korean writers Ch’oe Chông-hūi and Yan Sogiru, and others depending on student interest.
Spr JAPN0990 SO1 24473 TTh 1:00-2:20(10) (S. Perry)

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, Akutagawa Ryunosuke, Yoshia Nobuko, Kubokawa Ineko, Mishima Yukiko and Murakami Haruki, as well as ethnic Korean writers Ch’oe Chông-hūi and Yan Sogiru, and others depending on student interest.
Spr JAPN1990 SO1 24519 TTh 1:00-2:20(10) (S. Perry)

Korean

KREA 0100. Korean.
Begins with an introduction to the Korean writing system (Hangul) and focuses on building communicative competence in modern Korean in the four language modalities (listening, speaking, reading, writing). Provides a foundation for later work in spoken and written Korean. Six classroom hours per week. No prerequisite. Enrollment limited to 18. 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 KREA 0200 covers the entire year and is recorded as the final grade for both semesters.
Fall KREA0100 SO1 15235 MWF 9:00-9:50(04) (H. Ha)
Fall KREA0100 SO1 15235 TTh 9:00-9:50(04) (H. Ha)
Fall KREA0100 SO2 15236 MWF 12:00-12:50(04) (H. Ha)
Fall KREA0100 SO2 15236 TTh 12:00-12:50(04) (H. Ha)

KREA 0200. Korean.
Begins with an introduction to the Korean writing system (Hangul) and focuses on building communicative competence in modern Korean in the four language modalities (listening, speaking, reading, writing). Provides a foundation for later work in spoken and written Korean. Six classroom hours per week. Enrollment limited to 18. This is the second half of a year-long course. Students must have taken KREA 0100 to receive credit for this course. The final grade for this course will become the final grade for KREA 0100. If KREA 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 KREA0200 SO1 24304 MWF 9:00-9:50(12) (H. Ha)
Spr KREA0200 SO1 24304 TTh 9:00-10:20(12) (H. Ha)
Spr KREA0200 SO2 24305 MWF 12:00-12:50(12) (H. Ha)
Spr KREA0200 SO2 24305 TTh 12:00-12:50(12) (H. Ha)

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. Five classroom hours per week. Prerequisite: KREA 0200 or instructor permission.
Fall KREA0300 SO1 15237 MWF 11:00-11:50(16) (H. Ha)
Fall KREA0300 SO1 15237 TTh 10:30-11:50(16) (H. Ha)

See Intermediate Korean (KREA 0300) for course description. Prerequisite: KREA 0100-0200 or equivalent.
Spr KREA0400 SO1 24306 MWF 11:00-11:50(04) (H. Ha)
Spr KREA0400 SO1 24306 TTh 10:30-11:50(04) (H. Ha)

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.
Fall KREA0500 SO1 15238 MWF 1:00-1:50(06) (C. Park)

KREA 0600. Advanced Korean.
See Advanced Korean (KREA 0500) for course description. Prerequisite: KREA 0500 or equivalent or permission of instructor.
Spr KREA0600 SO1 24307 MWF 1:00-1:50(06) (C. Park)

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 SO1 15244 TTh 10:30-11:50(15) (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.

Economics

ECON 0110. Principles of Economics.
Extensive coverage of economic issues, institutions, and terminology, 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 SO1 15731 MWF 9:00-9:50(01) (R. Friedberg)
Spr ECON0110 SO1 24584 MWF 9:00-9:50(02) (R. Friedberg)

ECON 0170. Essential Mathematics for Economics.
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 SO1 16637 MWF 2:00-2:50(07) (A. Poterack)
Spr ECON0170 SO1 25287 MWF 12:00-12:50(05) (A. Poterack)
Course Descriptions

ECON 0390. Income, Wealth, and Health Inequality in the United States.
The course begins with issues of measurement and definition. We then turn to examine the economic underpinnings of inequality, including the relationship between education, skill, and income; the intergenerational transmission of wealth and economic status; and the causal relationship between health and income. The third part of the course looks at the driving forces behind the large rise in inequality that has occurred since roughly 1980 as well as differential trends in life expectancy and health behaviors among income groups over this period. The last section examines government policies that impact inequality and the political economy of redistribution.

A course designed primarily for students who do not plan to concentrate in economics but who seek a basic understanding of the economics of less developed countries, including savings and investment, health and education, agriculture and employment, and interactions with the world economy, including trade, international capital flows, aid, and migration. Prerequisite: ECON 0110 or advanced placement. Enrollment limited to 100.

Basic accounting theory and practice. Accounting procedures for various forms of business organizations.

ECON 1110. Intermediate Microeconomics.
Tools for 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.

ECON 1130. Intermediate Microeconomics (Mathematical).
Microeconomic theory: Theories of the consumer and firm, competitive equilibrium, factor markets, 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.

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.

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 and 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.

ECON 1275. History of Economic Thought.
Seminar explores economic thought from the classical Greek philosophers to mid-twentieth-century economists. It is not a course in economic history. Rather, it deals with the content of economic writings such as Adam Smith’s Wealth of Nations and Karl Marx’s Capital. This course provides you with an overview of the history of economic ideas as well as an in-depth exploration of six of major figures in the history of economics: Adam Smith, Thorstein Veblen, Alfred Marshall, Karl Marx, F. A. Hayek, and John Maynard Keynes. Prerequisites: ECON 1110 or 1130; 1210; and 1620 or 1630. Enrollment limited to 30. WRIT

ECON 1300. Education, the Economy and School Reform (EDUC1150).
Interested students must register for EDUC 1150. Fall

ECON 1301. Economics of Education I.
This course teaches students how to use microeconomics to analyze a broad array of education policy issues. The departure of this course from ECON 1110 is the emphasis on studying microeconomics in applied settings, and in particular, using microeconomic concepts to think about, analyze, and solve policy questions in education. Prerequisite: ECON 1110 or 1130.

ECON 1303. History of Economic Thought.
Seminar explores economic thought from the classical Greek philosophers but also in the practice of central banks and major policy institutions. 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 and 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. WRIT

ECON 1304. Economic Policy.
For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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, 1629, 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. Louny)

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 parent’s education, race, 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)

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 9:00-9:50(01) (G. Siourounis)

Bargaining theory is emerging as an important area within the general rubric of game theory. Emphasis is on providing a relatively elementary version of the theory in order to make it accessible to a large number of students. Covers introductory concepts in game theory, strategic and axiomatic theories of bargaining and their connections, applications to competitive markets, strikes, etc. Prerequisite: ECON 1110 or 1130. Enrollment limited to 100.
Spr ECON1470 S01 25471 TTh 10:30-11:50(09) (J. Fanning)

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 insure 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 TTh 2:30-3:50(11) (N. 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 incentive 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 T 4:00-6:30(16) (D. D’Amico)

ECON 1490. Designing Internet Marketplaces.
How has the digital economy changed market interactions? The goal of this course is to help you think critically, using economic theory, about the future of the digital economy. What are important economic activities now being conducted digitally? How has digital implementation of these activities changed economists’ classical views and assumptions? What are ways in which we can use economics to engineer “better” digital markets? We will focus on several real-world markets (eg. eBay, Airbnb, Google advertising, Uber, Tinder, TaskRabbit) and topics (eg. market entry, pricing, search, auctions, matching, reputation, peer-to-peer platform design).
Spr ECON1490 S01 25975 TTh 9:00-10:20(01) ’To Be Arranged’

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 TTh 9:00-10:20(08) (D. Wyas)

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, including microfinance, family planning, or the problem of “missing women” in South-East Asia. DPLL Fall ECON1510 S01 16749 TTh 2:30-3:50(03) (L. Puterman)

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 TTh 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 9:00-9:50(07) (G. Siourounis)

ECON 1560. Economic Growth.
A theoretical and empirical examination of economic growth and income differences among countries. Focuses on both the historical experience of countries that are currently rich and the process of catch-up among poor countries. Topics include population growth, accumulation of physical and human capital, technological change, natural resources, income distribution, geography, government, and culture. Prerequisite: ECON 1110 or 1130; and MATH 0060, 0070, 0090, 0100, 0170, 0180, 0190, 0200 or 0350; or advanced placement. Enrollment limited to 100.
Spr ECON1560 S01 25101 MWF 10:00-10:50(03) ’To Be Arranged’

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 MATH 0090. Weekly one-hour computer conference required.
Fall ECON1620 S01 15767 TTh 9:00-10:20(08) (A. McCloskey)
Spr ECON1620 S01 25019 TTh 10:30-11:50(09) (B. Knight)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 ECON1620 S01 15777 TTh 10:30-11:50(13) (S. Schennach)
Spr ECON1620 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 15767 TTh 1:00-2:20(10) (S. Schennach)
Spr ECON1630 S01 25028 TTh 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.

Spr ECON1640 S01 25688 MW 8:30-9:50(02) (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 W 3:00-5:30(14) "To Be Arranged"

ECON 1670. Advanced Topics in Econometrics.
This class will present advanced topics in Econometrics. The focus will be on cross-sectional methods; the class will start with some basic results needed for any advanced econometrics work, before giving an introduction to asymptotic and identification techniques and concepts, with some applications.

Fall ECON1670 S01 16918 F 3:00-5:30(11) (S. Schennach)

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 ECON1710 S01 15782 MWF 11:00-11:50(15) (S. Kuo)
Fall ECON1710 S02 15783 MWF 1:00-1:50(15) (S. Kuo)
Spr ECON1710 S01 25039 MWF 11:00-11:50(15) (S. Kuo)
Spr ECON1710 S02 25040 MWF 1:00-1:50(15) (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 ECON1720 S01 16328 MWF 11:00-11:50(16) (G. Siourounis)
Spr ECON1720 S01 25041 MWF 12:00-12:50(05) (G. Siourounis)

ECON 1730. Venture Capital, Private Equity, and Entrepreneurship.
This course will use a combination of lectures and case discussions to prepare students to make decisions, both as entrepreneurs and venture capitalists, regarding the financing of rapidly growing firms. The course will focus on the following five areas:
1. Business valuation
2. Financing
3. Venture Capital Industry
4. Employment
5. Exit

Fall ECON1730 S01 17199 T 4:00-6:30(09) (R. La Porta)

ECON 1750. Investments II.
Individual securities: forwards, futures, options and basic derivatives, pricing conditions. Financial markets: main empirical features, equity premium and risk-free rate puzzles, 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 ECON1750 S01 16750 TTh 10:30-11:50(13) (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 ECON1760 S01 15793 TTh 2:30-3:50(03) (D. Wysa)

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 ECON1820 S01 16752 MWF 10:00-10:50(14) (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 ECON1850 S01 16357 TTh 1:00-2:20(10) (G. Galor)

Existence and efficiency of equilibria for a competitive economy; comparative statistics; time and uncertainty. Prerequisite: ECON 1110 or 1130. Enrollment limited to 100.

Spr ECON1860 S01 25473 TTh 2:30-3:50(11) (R. Vohra)
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 0100, or 0170, or 0180, 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 ECON1870 S01 25474 MW 8:30-9:50(02) (G. De Clippele)

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 ECON1960 S01 15790 M 3:00-5:30(15) (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 ECON2010 S01 15786 TR 1:00-2:20(10) (A. Poterack)

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, including the loading, cleaning and merging of complex survey data, and provide experience in the selection and interpretation of basic econometric methods.

Spr ECON2020 S01 25030 MW 10:30-11:50(03) (G. Loury)

ECON 2030. Introduction to Econometrics I.
The probabilistic and statistical basis of inference in econometrics.

Fall ECON2030 S01 15787 MW 10:30-11:50(14) (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.

Spr ECON2040 S01 25031 TTh 9:00-10:20(01) (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 ECON2050 S01 15788 MW 2:30-3:50(06) (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.

Spr ECON2060 S01 25032 MW 1:00-2:20(07) (K. Rozen)

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. Galar)

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. Eggertsson)

ECON 2150. Market Design.
This is a theoretical course in market design, specifically studying the theory and applications of matching. It is designed for students interested in market and mechanism design, and may also be of interest to students interested in utilizing applied theory in their research. The course will begin with an overview of matching markets, and will quickly move to recent advances and open research topics.

Fall ECON2150 S01 17333 M 1:00-3:30(17) (B. Pakzad-Hurson)

ECON 2180. Game Theory.

Spr ECON2180 S01 25475 TTh 9:00-10:20(01) (J. Fanning)

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.

Spr ECON2260 S01 25793 TTh 2:30-3:50(11) (B. Knight)

ECON 2320. Economics of Labor and Population.
The 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 MW 9:00-10:20(01) (E. Oster)

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(02) (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 TTh 2:30-3:50(10) (A. Aizer)

ECON 2410. Urbanization.
The first part of the course covers social interactions, productivity spillovers, systems of cities models, urban growth, and rural-urban migration. The second part of the course covers topics such as durable housing, land market regulation and exclusion, and local political economy. Besides covering basic theoretical models, emphasis is placed on working through recent empirical papers on both the USA and developing countries. Prerequisites: ECON 2050 and 2060.

Spr ECON2410 S01 25794 MW 2:30-3:50(07) (M. Turner)

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 W 1:00-3:30(06) (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 25476 TTh 10:30-11:50(09) (N. Hilger)

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 2510. Economic Development I.
This course covers issues related to labor, land, and natural resource markets in developing countries, in partial and general equilibrium settings. Topics covered include: The agricultural household model, under complete and incomplete market assumptions; household and individual labor supply, migration, self-employment, and the informal sector; rental market frictions and sharecropping arrangements; and environmental externalities (e.g., pollution, water usage, etc.), and sustainable development.
Spr ECON2510 S01 25628 MW 9:00-10:20(02) (B. Steinberg)

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 social-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 MW 10:30-11:50(14) (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. Economic Growth and Comparative Development.
This course will explore the origins of the vast inequality in income per capita across countries, regions and ethnic groups. It will analyze the determinants of growth process over the entire course of human history and will examine the role of deeply-rooted geographical, institutional, cultural, and genetic factors in the observed pattern of uneven development across the globe.
Fall ECON2830 S01 16356 F 9:30-12:00(08) (O. Galor)

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 10:30-11:50(13) (J. Blaum)

ECON 2930. Workshop in Applied Economics.
No description available.
Fall ECON2930 S01 16919 Th 4:00-5:30(04) 'To Be Arranged'
Spr ECON2930 S01 25618 Th 4:00-5:30(17) 'To Be Arranged'

ECON 2950. Workshop in Econometrics.
No description available.
Fall ECON2950 S01 16920 T 4:00-5:30(09) 'To Be Arranged'
Spr ECON2950 S01 25619 T 4:00-5:30(16) 'To Be Arranged'

ECON 2960. Workshop in Macroeconomics and Related Topics.
No description available.
Fall ECON2960 S01 16921 W 4:00-5:30(17) 'To Be Arranged'
Spr ECON2960 S01 25620 W 4:00-5:30(14) 'To Be Arranged'

ECON 2970. Workshop in Economic Theory.
No description available.
Fall ECON2970 S01 16922 M 4:00-5:30(15) 'To Be Arranged'
Spr ECON2970 S01 25621 M 4:00-5:30(13) 'To Be Arranged'

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'

Education
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 EDUC0400 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 transforming their developing identities. Enrollment limited to 20 first year students. FYS
Spr EDUC0410/S01 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 EDUC0410ES/S01 24100 MWF 11:00-11:50(04) (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 EDUC0410FS/S01 24120 MWF 11:00-11:50(04) (D. Rangel)

EDUC 0410G. The Afterschool Hours.
The family and the school are seen as the two primary institutions of childhood. But what about the space in between? Over the course of the twentieth century—once compulsory schooling became law—the way American children occupied the hours between school and home became ever more important. This course examines the literature on how youth should "best" spend their afterschool time. Looking at enrichment courses, sports, work, leisure, and more, this class introduces you to the social science method of interviewing as you learn to undertake your own original research and reflect on how you spent your own afterschool hours. FYS WRIT
Fall EDUC0410CS/S01 17116 TTh 2:30-3:50(03) (H. Levy Friedman)

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. DPLL WRIT SOPH
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 EDUC0800 S01 15077 TTh 1:00-2:20(10) (J. Li)

This course seeks to understand, analyze, and criticize sport—seen here as one of the primary institutions in the lives of Americans. Working from the basis of sporting events in the Durkheimian sense of symbolic community, we will elevate them to the status of educational and religious institutions in our everyday lives (as we interrogate them and see them in relation to these, and other, institutions as well). Using the primary lenses of gender and race this class examines sports at five different levels—professional, Olympic, NCAA, scholastic, and youth—to understand how athletics have impacted, and will continue to impact, American society.
Spr EDUC0860 S01 25710 MWF 10:00-10:50(03) (H. Levy Friedman)

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 EDUC0900 S01 15154 M 3:00-5:30(15) (D. Silva Pimentel)

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 EDUC1010 S01 24116 M 3:00-5:30(13) (C. Villarreal)

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) (R. Kantrowitz)

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) (R. Kantrowitz)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**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?  
Fall EDUC1040 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. Throughout we will ponder what policies might best fulfill the promise of higher education in the U.S.  
Fall EDUC1060 S02 15129 M 3:00-5:30(15) 'To Be Arranged'

**EDUC 1070A. Student Teaching: English.**
S/NC.  
Fall EDUC1070A S01 15090 Arranged  (L. Snyder)  
Spr EDUC1070A S01 24101 Arranged  (L. Snyder)

**EDUC 1070B. Student Teaching: History and Social Studies.**
S/NC.  
Fall EDUC1070B S01 15092 Arranged  (C. Villarreal)  
Spr EDUC1070B S01 24102 Arranged  (C. Villarreal)

**EDUC 1070C. Student Teaching: Science.**
S/NC.  
Fall EDUC1070C S01 15094 Arranged  (D. Silva Pimentel)  
Spr EDUC1070C S01 24104 Arranged  (D. Silva Pimentel)

**EDUC 1080A. Analysis of Teaching: English.**
S/NC.  
Fall EDUC1080A S01 15095 W 5:30-8:00PM(17)  (L. Snyder)  
Spr EDUC1080A S01 24105 W 4:30-7:00(08)  (L. Snyder)

**EDUC 1080B. Analysis of Teaching: History and Social Studies.**
S/NC.  
Fall EDUC1080B S01 15096 W 5:30-8:00PM(17)  (C. Villarreal)  
Spr EDUC1080B S01 24106 W 4:30-7:00(08)  (C. Villarreal)

**EDUC 1080C. Analysis of Teaching: Science.**
S/NC.  
Fall EDUC1080C S01 15097 W 5:30-8:00PM(17)  (D. Silva Pimentel)  
Spr EDUC1080C S01 24107 W 4:30-7:00(08)  (D. Silva Pimentel)

**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)

**EDUC 1110. Introductory Statistics for Education Research and Policy Analysis.**
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(13)  (M. Kraft)  
Spr EDUC1110 S02 24090 Arranged(13) 'To Be Arranged'  
Spr EDUC1110 S03 24091 Arranged(13) 'To Be Arranged'

**EDUC 1130. Economics of Education I.**
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)

**EDUC 1150. Education, the Economy and School Reform.**
This seminar examines the linkages between educational achievement and economic outcomes for individuals and nations. We study a range of system, organizational, and personnel reforms in education by reviewing the empirical evidence and debating which reforms hold promise for improving public education and closing persistent achievement gaps. Understanding and critiquing the experimental, quasi-experimental and descriptive research methods used in the empirical literature will play a central role in the course. Prerequisites: Education and PP concentrators, EDUC 1130 and EDUC 1110 (or equivalent); Economics concentrators, ECON 1110 or ECON 1130, and ECON 1620. Enrollment limited to 20.  
WRIT Fall EDUC1150 S01 17441 M 3:00-5:30(15)  (J. Tyler)

**EDUC 1270. Adolescence in Social Context.**
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 MW 1:00-1:50(06)  (A. Flores)

**EDUC 1360. Empire, Childhood, and Youth.**
How did empires shape the childhoods of colonial subjects? What does this bring to our understanding of how children learn and develop? Constructed to reflect particular notions of race, class, gender, and culture, the children in colonial and postcolonial contexts both conform to and contradict universal definitions of childhood and youth. Focusing on the British and French empires in the twentieth century, we examine how children were implicated in empire. We also consider children’s own agency in defining their place in imperial regimes as well as how children and youth are involved in and affected by decolonization and post-imperial contexts. DPLL  
Fall EDUC1360 S01 17118 MW 8:30-9:50(01)  (R. Kantrowitz)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 sociopolitical 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. 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 the 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(14) (J. Collins)

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 Th 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. Spoehr)

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 CLPS 0610 (COGS 0630), or CLPS 0600 (PSYC 0810). Enrollment limited to 30. WRIT Fall EDUC1850 S01 15078 W 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, self-practice, self-understanding, relations with others, 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)

EDUC 1870. Education and Human Development in East Asia.
This course examines education and human development in East Asia, mainly China, Japan, and South Korea, using international and comparative perspectives. We will examine the role of educational systems and key contexts such as family, school, and globalization in the development and educational processes of children and adolescents. We will also explore culturally unique concepts, diversity, and inequality in educational processes across and within these countries. The course draws on a range of contemporary studies from interdisciplinary social science fields, some of them theoretical and many of them empirical (both qualitative and quantitative). DPLL Spr EDUC1870 S01 25666 F 3:00-5:30(15) (Y. Yamamoto)

EDUC 1890. Family Engagement in Education.
How do families from diverse backgrounds support their children's schooling? What does research tell us about how families influence their children's educational processes and outcomes? Students in this course will examine theories and empirical studies of family processes and engagement in education drawing from psychology, sociology, anthropology, and educational studies. The course offers an in-depth look at focal topics across diverse groups within the U.S. as well as societies abroad to examine issues such as culture, ethnicity, immigration, and socioeconomic status. Elements and programs that promote partnerships between family and school are also discussed. DPLL Fall EDUC1890 S01 17063 Th 9:00-10:20(08) (Y. Yamamoto)

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/N/C.
Fall EDUC2070S S01 15098 Arranged (L. Snyder)
Spr EDUC2070AS S01 24108 Arranged (L. Snyder)
EDUC 2070B. Student Teaching: History and Social Studies. S/N/C.
Fall EDUC2070E S01 15099 Arranged (C. Villarreal)
Spr EDUC2070BS S01 24110 Arranged (C. Villarreal)
EDUC 2070C. Student Teaching: Science. S/N/C.
Fall EDUC2070C S01 15102 Arranged (D. Silva Pimentel)
Spr EDUC2070CS S01 24111 Arranged (D. Silva Pimentel)
EDUC 2080A. Analysis of Teaching: English. No credit course.
Fall EDUC2080A S01 15104 W 5:30-8:00PM(17) (L. Snyder)
Spr EDUC2080AAS S01 24112 W 4:30-7:00(18) (L. Snyder)
EDUC 2080B. Analysis of Teaching: History and Social Studies. No credit course.
Fall EDUC2080E S01 15103 W 5:30-8:00PM(17) (C. Villarreal)
Spr EDUC2080EBS S01 24109 W 4:30-7:00(18) (C. Villarreal)
EDUC 2080C. Analysis of Teaching: Science. No credit course.
Fall EDUC2080C S01 15100 W 5:30-8:00PM(17) (D. Silva Pimentel)
Spr EDUC2080CS S01 24113 W 4:30-7:00(18) (D. Silva Pimentel)
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, ethnic and linguistic diversity; assessment; teaching and learning as well as topics arising from the experiences in classrooms. S/N/C.
Fall EDUC2120 S01 15126 Th 4:00-7:00(04) (J. Gujarati)
EDUC 2140. Methods and Materials of Math, Science, and Technology. Using a developmental approach, students are introduced to the major concepts and teaching methods used in elementary math and science classrooms. S/N/C.
Fall EDUC2140 S01 15146 F 1:00-4:30(07) (D. Silva Pimentel)
Spr EDUC2140 S01 24130 F 1:00-4:30(07) (D. Silva Pimentel)
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/N/C.
Fall EDUC2150 S01 15147 M 4:00-6:30(15) (M. Nosal)
Spr EDUC2150 S01 24131 T 4:00-6:30(09) (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/N/C.
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/N/C.
Spr EDUC2280 S01 24126 Th 4:00-7:00(17) (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(17) (M. Kraft)
EDUC 2330. Urban Politics and School Governance. 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.
Fall EDUC2330 S01 17439 M 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.
Spr EDUC2350 S01 25946 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 W 4:00-6:30(17) (J. Papay)
EDUC 2370. Internship. Students in the Urban Education Policy Master's Program participate in year-long internships in organizations that focus on urban education policy. Each student works with his or her site supervisor to develop a job description for the internship that allows the student to learn from and contribute to the work of the host organization.
Fall EDUC2370 S01 17413 Arranged (K. Wong)
EDUC 2380. Internship. Students in the Urban Education Policy Master's Program participate in year-long internships in organizations that focus on urban education policy. Each student works with his or her site supervisor to develop a job description for the internship that allows the student to learn from and contribute to the work of the host organization.
Spr EDUC2380 S01 25923 Arranged 'To Be Arranged'
EDUC 2450. Exchange Scholar Program. EDUC 2980. Studies in Education. Independent study; must be arranged in advance. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
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.
Egytology and Assyriology

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. FY S WRIT
Fall ASYR0300 S01 15156 TTh 10:30-11:50(13) (J. Steele)

ASYR 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 ASYR1000 S01 15157 MWF 11:00-11:50(16) (M. Rutz)

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" (J. Steele)

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) (M. Rutz)

ASYR 1160. Color and Culture in the Ancient Near East.
This seminar investigates the meaning of color as a culturally mediated and culturally embedded phenomenon using case studies drawn from the civilizations of the ancient Near East and Aegean. Employing contemporary critical theories from cognition, phenomenology, linguistics and material culture studies, we will explore how human beings perceive, categorized and valued color in ways that vary cross-culturally.
Fall ASYR1160 S01 17294 TTh 2:30-3:50(03) "To Be Arranged"

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 Babylon, 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 2310A. Ancient Scientific Texts: Akkadian.
Readings and analysis of a major scientific text in Akkadian. Prerequisite: AWAS 0200 or 0210. Open to graduate students only.
Spr ASYR2310A S01 25722 M 3:00-5:30(13) (M. Rutz)

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 15158 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 Hititite Language and Literature.
This course is an introduction to Hititite language, literature, and culture. Hititite, 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 Hititites, 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.
Spr ASYR2900 S01 24153 TTh 1:00-2:20(10) (F. Rojas Silva)

Interested students must register for RELS 2100F.
Fall ASYR2920 S01 17137 Arranged "To Be Arranged"

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 9:00-10:10(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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 MWF 12:00-12:50(12)  (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 MWF 1:00-1:50(06)  "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.

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 most representative 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.

Fall EGYT2300 S01 17281 Arranged  (J. Allen)
Spr EGYT2300 S01 24156 Arranged  (J. Allen)

EGYT 2800. Ancient Egyptian Phonology. Introduction into the phonology of the ancient Egyptian language, from its proto-Semitic cognates to its final stage, the six major dialects of Coptic. The course will concentrate not only on phonology but also on how the principles of Egyptian phonology can be used in understanding and interpreting written forms.

Spr EGYT2800 S01 25637 MW 8:30-9:50(02)  (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 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.

Fall 2017
The following courses may be of interest to Egyptology concentrators. Please see the sponsoring department for the time and location of each course.

Archaeology and the Ancient World
ARCH 1630 Fighting Pharaohs: Ancient Egyptian Warfare
ARCH 2115 Ancient Mediterranean Scripts
ARCH 2725 The Making of Egypt

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, 0200, 0350, 0520, 0540, which may be taken concurrently.

Students MUST register for the course lecture (M01) and one of the sections during the SAME registration session. Banner will not allow a student to register for one component without registering for the other at the same time. Further, if you drop one component of the course on Banner, both components will be dropped.

Fall ENGN0030 M01 15397 MWF 1:00-1:50  (K. Haberstroh)
Fall ENGN0030 S01 15392 T 9:00-10:20(15)  (K. Haberstroh)
Fall ENGN0030 S02 15393 T 2:30-3:50(15)  (B. Sheldon)
Fall ENGN0030 S03 15394 Th 9:00-10:20(15)  (B. Sheldon)
Fall ENGN0030 S04 15395 Th 2:30-3:50(15)  (B. Sheldon)

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 16667 MWF 1:00-1:50  (K. Kim)
Fall ENGN0031 S01 16664 T 1:00-2:30(10)  (S. Reda)
Fall ENGN0031 S02 16666 Th 1:00-2:30(10)  (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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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(15) (B. Hazeltine)
Fall ENGN0090 S02 15400 TTh 1:00-2:20(15) (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 mode. 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 ENGN0120/S01 25164 MWF 11:00-11:50(04) (R. Fleeter)

ENGN 0120B. Crossing the Space Chasm Through Engineering Design.
Five decades of human activity in space has provided the world community with benefits including instant global communications and positioning, human and robotic exploration of the moon, planets and sun, and a perspective of earth which continues to inform and influence our relationship with our environment.
Unlike other technical revolutions of the 20th century space has not transitioned to a commercial, consumer market commodity. Rather its users and applications remain primarily large and institutional.
To experience the challenges of engineering design and of changing an industrial paradigm, we will work in one or several groups to identify a use of space, and a plan for its implementation, that could help transition space from its status as a niche technology. Through the process of design, we will confront the technical, economic, societal and political barriers to obtaining increased benefits from technologies in general, and space in particular, and to making new technologies beneficial to a wider range of users. Enrollment limited to 18 first year students. Instructor permission required. FYS WRIT
Spr ENGN0120/S01 25165 MWF 2:00-2:50(07) (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)
Spr ENGN0260 S01 25166 Arranged (C. Bull)

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 15368 MWF 9:00-9:50(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, laboratory.
Fall ENGN0410 S01 15362 TTh 9:00-10:20(08) (S. Kumar)
Fall ENGN0410 S01 15362 M 3:00-3:50(08) (S. Kumar)

This course presents a broad introduction to environmental engineering, and will help students to explore environmental engineering as an academic major and as career option. The course covers topics in environmental engineering: chemistry fundamentals, mass balance, air pollution, water pollution, sustainable solid waste management and global atmospheric change. The course is essential for the environmental engineering students who are planning to take more advanced courses in environmental engineering. This course is also for the students in other engineering disciplines and sciences, who are interested in environmental constraints on technology development and practice, which have become increasingly important in many fields.
Fall ENGN0490 S01 17168 TTh 1:00-2:20(10) (I. Kulaots)

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. Rosenstein)

ENGN 0720. Thermodynamics.
An introduction to macroscopic thermodynamics and some of its engineering applications. Presents basic concepts related to equilibrium, and the zeroth, first and second laws for both closed and open systems. Examples include analysis of engines, turbines, and other engineering cycles, phase equilibrium and separation processes, chemical reactions, surface phenomena, magnetic and dielectric materials. Lectures, recitations, and laboratory. Prerequisites: ENGN 0030 or ENGN 0040. Recommended: ENGN 0410 or CHEM 0330.
Spr ENGN0720 S01 25198 TTh 10:30-11:50(09) (R. Hurt)
Fall ENGN0810 S01 15416 MWF 1:00-1:50(06) (J. Franck)

ENGN 0900. Managerial 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 0900 or MATH 0100.
Spr ENGN0900 S01 25202 TTh 1:00-2:20(15) (B. Hazeltine)
Spr ENGN0900 S02 25203 TTh 2:30-3:50(15) (B. Hazeltine)

ENGN 0930A. Appropriate Technology
Our goal for this course is that you leave it with the ability to think and act rationally and constructively on issues of technology and the human condition. We will provide background on useful technologies (e.g. wind, solar, hydro), techniques to fabricate them, and an opportunity to explore the obstacles to their implementation.
Spr ENGN0930A S01 25204 TTh 10:30-11:50(09) (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(02) (I. Gonsher)

ENGN 0930L. Biomedical Engineering Design and Innovation.
This course is an incubator for innovative ideas in biomedical design. Students across all disciplines are invited to collaborate with biomedical engineers to enhance the development of design solutions that address clinical and public health concerns. 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 throughout the semester.
Fall ENGN0930L S01 17549 MW 8:30-9:50(01) (A. Tripathi)

ENGN 0931. Internet of Everything.
The Internet can be visualized as an Internet of information, Internet of people, Internet of places and most importantly the Internet of “things.” Internet of Everything includes these four paradigms. In this class, we will learn about how these four ideas can come together to make a difference in the world. We will study the underlying infrastructure that supports Internet, the TCP/IP model, addressing and routing. Experiments and projects in the class would include a tree on the Internet communicating with the sprinkler system only when it is thirsty. Privacy and ethical issues will also be addressed.
Spr ENGN0931 S01 25209 TTh 6:40-8:00PM(18) (R. Pendse)

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 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(13) (J. Fontaine)
Spr ENGN1000 S01 25211 MW 3:00-5:30(13) (J. Fontaine)

Entrepreneurship is innovation in practice: transforming ideas into opportunities, and, through a deliberate process, opportunities into commercial realities. These entrepreneurial activities can take place in two contexts: the creation of new organizations; and within existing organizations. This course will present an entrepreneurial framework for these entrepreneurial processes, supported by case studies that illustrate essential elements. Successful entrepreneurs and expert practitioners will be introduced who will highlight practical approaches to entrepreneurial success. Enrollment limited to 35. WRIT
Fall ENGN1010 S01 15295 TTh 10:30-11:50(13) (D. Warshay)
Fall ENGN1010 S03 15428 M 6:00-8:30PM(13) (J. Cohen)
Fall ENGN1010 S04 15429 TTh 2:30-3:50(03) (J. Harry)
Spr ENGN1010 S01 25215 TTh 1:00-2:20(10) (D. Warshay)
Spr ENGN1010 S02 25217 W 3:00-5:30(14) "To Be Arranged"

ENGN 1110. Transport and Biotransport Processes.
Aim: To develop a fundamental understanding of mass transport in chemical and biological systems. The course includes: mechanism of transport, biochemical interactions and separations; mass transport in reading systems; absorption; membrane and transvascular transport; electrophoretic separations; pharmacokinetics and drug transport; equilibrium stage processes; distillation and extraction. Other features: design concepts; modern experimental and computing techniques; laboratory exercises.
Spr ENGN1110 S01 25220 TTh 2:30-3:50(11) (A. Shukla)

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 1140. Chemical Process Design.
Chemical process synthesis, flow charting, and evaluation of design alternatives. Process equipment sizing as determined by rate phenomena, economics, and thermodynamic limitations. Introduction to optimization theory. Applications of these principles to case studies. Prerequisites: ENGN 1110, 1130; ENGN 1120 (may be taken concurrently).
Spr ENGN1140 S01 25223 TTh 6:40-8:00PM(18) "To Be Arranged"

ENGN 1210. Biomechanics.
Spr ENGN1210 S01 25225 MWF 2:00-2:50(07) (T. Powers)

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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 W 9:00-9:50(02) (H. Gao)

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 25223 W 3:00-5:30(14) (I. Kulaods)

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) (O. 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 Walle)

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)

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 2:30-3:50(03) (N. Padture)

ENGN 1480. Metallic Materials.
The microstructure of metals, microstructural evolution during processing, and the relationships between the microstructure and the physical properties of the material. Crystallography and x-ray diffraction. Crystalline defects, dislocations, grain boundaries, and their effects on mechanical and other properties. Solid state diffusion and solid state phase transformations. Oxidation and corrosion. Laboratory. Prerequisite: ENGN 0410, 1410.
Spr ENGN1480 S01 25348 TTh 10:30-11:50(09) (S. Kumar)

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) (K. Coulombe)

ENGN 1510. Nanoengineering and Nanomedicine.
Students 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 S02 17257 TTh 6:40-8:00PM(05) (G. Palmore)

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
Spr ENGN1520 S01 25800 TTh 9:00-10:20(01) (K. Coulombe)

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) (G. Kimia)

ENGN 1580. Communication Systems.
We will learn basic communication and information theory, but with examples drawn from a variety of areas not normally considered communication. Basic knowledge of Laplace/Fourier transforms and frequency domain is essential (ENGN 0520 or equivalent required). Linear Systems (ENGN 1570), Probability (APMA 1650 or MATH 1610), Linear Algebra (MATH 0520 or 0540) and E&M (ENGN 0510) are helpful but not required. Analog modulation, digitization, signal space, digital modulation and noise, information theory, selected topics in modern communication/ information network theory and applications to biology and physics as time and interest permit. Depending on preparation, we may also pursue final projects.
Spr ENGN1580 S01 25235 TTh 2:30-3:50(11) (C. Rose)
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)

Elementary device physics and circuit characteristics of semiconductor diodes, bipolar junction transistors (BJTs), and field effect transistors (FETs). Analysis and design of practical circuits using discrete semiconductor devices. Constraint on and techniques for linear integrated circuit (IC) design and the use of linear ICs as circuit building blocks. Laboratory. Prerequisites: ENGN 0510, 0520 or equivalent.
Spr ENGN1620 S01 25236 MWF 2:00-2:50(07) (W. Patterson)

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(13) (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.
Fall 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 external and internal 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. Kulaots)

ENGN 1720. Design of Thermal Engines.
Students will work in groups on semester long engine design projects. Projects are to incorporate: formulation of design problem statements and specifications, consideration of alternative solutions, detailed design descriptions, development and use of design methodology, development of student creativity and use of acquired engineering skills, while including realistic constraints such as economic factors, safety, reliability, ethics, social impact, etc. Lectures, laboratory, and computer-aided design projects with oral and written reports. Lectures to cover: thermodynamics, heat transfer, fluid dynamics, kinematics/dynamics, lubrication, combustion, fuels, and pollution of thermal engines. Prerequisites: ENGN 0720 and 0810.
Spr ENGN1720 S01 25241 MW 4:30-6:00(13) "To Be Arranged"

ENGN 1740. Computer Aided Visualization and Design.
Provides instruction in the application of computers to the design methods in engineering. Hands-on experience in use of CAD/CAE software packages for geometric modeling, visualization, and drafting. Emphasis on applications to solids and structural problems. Independent design projects are carried out. Course counts as an ABET upper-level design course for mechanical and civil engineering concentrators. Prerequisite: ENGN 0310.
Spr ENGN1740 S01 25242 TTh 7:30-8:50PM(18) (B. Burke)

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. Flieter)

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 for 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 ENGN1930B 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 MW 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 18 students.
Fall ENGN1930M S01 15450 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 1930U. Renewable Energy Technologies.
Analysis of the thermodynamics, physics, engineering and policy issues associated with renewable and non-renewable energy technologies with applications appropriate to both the developed and the developing world. Specific technologies that will be studied include Fossil fuels, Wind, Solar, Hydro, Biomass and Nuclear. Energy consumption technologies, such as power generation and transportation will also be studied. Some technical background, such as ENGN 0030, 0040 and 0720, is strongly recommended.
Spr ENGN1930U S01 25246 TTh 2:30-3:50(11) (C. Bull)

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(13) (B. Burke)

Designing kinetic systems relies on both mechanical and electrical engineering. These systems include everything from mobile robots used for rescue operation to electrically powered moving sculptures. Through a series of projects, students combine their knowledge of electronic circuit design, kinematics, control theory, microcontrollers, and programming to build interactive art and robotic vehicles. Projects culminate in the design of a kinetic system that groups enter into a class-wide competition. Some programming experience is helpful but not required. Prerequisites ENGN 0040, ENGN 0520, and APMA 0330 (or equivalent). An additional application process will be conducted before students are approved to take the course.
Spr ENGN1931I S01 25905 TTh 10:30-11:50(09) (R. Bahar)

ENGN 1931J. Social Impact of Emerging Technologies – The Role of Engineers.
The role of engineering sciences in an ever-changing technology-driven world. Students will develop basic working knowledge of selected contemporary technologies that help identify and forecast future prospects while discerning future disruptions. Emphasis on the importance of ethical and social responsibilities that technologists must shoulder in answering societal challenges and contributing to policy making and corporate leadership. How do we create beneficial technologies yet anticipate their potential social costs, such as workforce automation or overdependence on the internet? Will we give up brains as our last private space? Who will control the data / technology ecosystem that influences our decisions?
Fall ENGN1931J S01 17367 Th 4:00-6:30(04) (A. Nuumikko)

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. No 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. WRIT
Fall ENGN1931P S01 15462 TTh 10:30-11:50(13) (I. Kulaots)

ENGN 1931T. Control Systems Engineering.
Control Systems is an Engineering discipline that applies control theory to analyze and design systems with desired response behavior. The objective of this course is to introduce the student to the topic of feedback control design with applications on many diverse systems. The course will cover the fundamentals of classical control theory such as modeling, simulation, stability, controller design and digital implementation. It will also address basic aspects of state-space and modern control theory. The course is open to all Engineering majors and will make use of existing simulation packages such as Matlab/Simulink, and software tools and their environmental footprint. 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. WRIT
Spr ENGN1931T S01 25350 MTh 6:00-8:00PM(18) 'To Be Arranged'

ENGN 1931Z. Interfaces, Information + Automation.
Laboratory-intensive course to help students develop and implement simple computer programs in Python to control, query, and integrate discrete (traditionally isolated) systems, ranging from automobiles to websites. Assignments will provide hands-on practice using programmatic interfaces to control both physical and virtual systems. Topics include physical interfaces and communication protocols (e.g., GPIB, RS-232, USB) as well as accessing online resources (e.g., SOAP and RESTful web services) and building hybrid systems for data acquisition and analysis. Formal programming experience is not required, but familiarity with either Matlab or Python (at the level of CSCI 0040 or higher) would be very helpful.
Spr ENGN1931Z S01 25885 MWF 11:00-11:50(04) (R. Zia)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Engineers persistently aim to create new structures, machines, and devices to leverage physical principles to man’s advantage. Stemming from recent concerns over the environmental impact of technology and increased market competition, there is heightened focus on increasing efficiency. Therefore, future engineers must come up with designs that are not only functional but also optimal.

The course will present the mathematical theory of engineering optimization. Review of optimization theory and techniques from calculus. Calculus of variations. Necessary and sufficient conditions for optimality. Bioinspired engineering: optimal designs found in nature. Projects involving design and fabrication of optimal engineering systems will be encouraged.

Fall ENGN1950 S01 17299 MWF 10:00-10:50(14) (H. Kesari)

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.

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.

An introduction to method of mathematical analysis in physical science and engineering. This is the first course in a two-semester sequence. It includes: Complex functions and complex calculus, Fourier series and Fourier transform, Methods for solving Partial differential equations, Calculus of variations.

Fall ENGN2010 S01 17287 MTh 6:40-8:00PM "To Be Arranged"

An introduction to methods of mathematical analysis in physical science and engineering. The first semester course includes linear algebra and tensor analysis; analytic functions of a complex variable; integration in the complex plane; potential theory. The second semester course includes probability theory; eigenvalue problems; calculus of variations and extremum principles; wave propagation; other partial differential equations of evolution.

Spr ENGN2020 S01 25252 MTh 6:40-8:00PM(18) (A. Peterson)

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 Th 3:00-5:50(03) (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(14) (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 15381 W 3:00-5:50(17) (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(16) "To Be Arranged"

ENGN 2140. Innovation and Technology Management II.
Explores 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(11) "To Be Arranged"

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(13) (A. Kingon)

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 IMEE program.

Spr ENGN2160 S01 25256 M 3:00-5:50(13) (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 globalized dynamics and its relationship to entrepreneurship. Prerequisite: ENGN 2110. Enrollment limited to graduate students in the PRIME program.
Spr ENGN2180 S01 25268 Th 3:00-5:50(17) (P. McHugh)

ENGN 2210. Continuum Mechanics.
Fall ENGN2210 S01 15470 MWF 12:00-12:50(12) (H. Gao)

Spr ENGN2220 S01 25299 MWF 10:00-10:50(03) (C. Franck)

Spr ENGN2260 S01 25351 MWF 1:00-1:50(06) (P. Guduru)

ENGN 2290. Plasticity.
Theory of the inelastic behavior of materials with negligible time effects. Experimental background for metals and fundamental postulates for plastic stress-strain relations. Variational principles for incremental elastoplastic-plastic problems, uniqueness. Upper and lower bound theorems of limit analysis and shakedown. Slip line theory. Representative problems in structural analysis, metal forming, indentation, strain and stress concentrations at notches, and ductile failure.
Spr ENGN2290 S01 25300 MWF 2:00-2:50(07) (D. Henann)

Fall ENGN2340 S01 15475 MWF 8:30-9:50(01) (A. Bower)

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.
Spr ENGN2400 S01 25301 TTh 9:00-10:20(01) (D. Paine)

ENGN 2410. Thermodynamics of Materials.
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). Prerequisite: background in basic thermodynamics. Recommended: ENGN 1410 or 2410 or equivalent.
Spr ENGN2420 S01 25291 MW 8:30-9:50(02) (E. Chason)

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 Th 9:00-10:20(08) (E. Chason)

ENGN 2500. Medical Image Analysis.
Explosive growth in medical image analysis has enabled noninvasive methods to diagnose and treat diseases. The course will first discuss the fundamentals of formation of medical images such as CT, MRI, ultrasound, and nuclear imaging; then consider clinical constraints and discuss methods in image guided therapy/surgery, techniques to detect, delineate, measure, and visualize medical organs and structures.
Spr ENGN2500 S01 25303 Th 2:00-3:50(11) (B. Kimia)

ENGN 2502. 3D Photography.
In 3D Photography, cameras and lights are used to capture the shape and appearance of 3D objects represented as graphical models for applications such as computer animation, game development, electronic commerce, heritage preservation, reverse engineering, and virtual reality. This course covers 3D capture techniques and systems, surface representations and data structures, as well as methods to smooth, denoise, edit, compress, transmit, simplify, and optimize very large polygonal models. Instructor permission required.
Spr ENGN2502 S01 25304 Th 4:00-6:30(17) (G. Taubin)

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. Audio and Speech Processing.
Signal-processing and machine-learning techniques for speech, music and other audio signals is the topic. The basics for speech production and hearing are introduced. PDEs and simplified vocal-tract models are derived for speech and acoustic propagation models are described. LPC, DFT/cepstral audio analysis methods are discussed as well as the modern method for speech synthesis. Basic dynamic programming and hidden Markov modeling are introduced. Microphone-array methods are presented. Coding methods for speech and music are included. Real-time issues are considered. A project and presentation are important in grading. Offered every other year:
Spr ENGN2540 S01 25352 MW 11:00-11:50(04) (H. Silverman)
ENGN 2660. Physics and Technology of Semiconductor Heterostructures
Covers, largely from an experimental point of view, topics of current interest in semiconductor heterostructure physics and technology: magentotransport in two-dimensional electron gas; integer and fractional quantum Hall effects; resonant tunneling and superlattice transport; optical and transport properties of quantum wires and dots; heterostructure-based devices; other topics of student interest. Prerequisites: PHYS 1410 or equivalent quantum mechanics and ENGN 1590 or introductory device course helpful but not required.
Spr ENGN2660 S01 25305 TTh 1:00-2:20(10) (A. Zaslavsky)

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; reaction rate theory; reactor design and operation. Students should have a background in chemical engineering or permission. Enrollment limited to 20.
Fall ENGN2750 S01 25314 MWF 1:00-1:50(06) (C. Goldsmith)

ENGN 2760. Heat and Mass Transfer
Spr ENGN2760 S01 25239 MWF 10:00-10:50(03) (J. Liu)

ENGN 2770. Atomic 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, reaction path, and reaction rates. Prerequisites include solid-state physics, chemical kinetics, quantum chemistry, and computational chemistry. Students should have a background in quantum chemistry and computational methods. Prerequisites: ENGN 1620 and 1630, or instructor permission. Enrollment limited to 20.
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) (D. Harris)

ENGN 2820. Fluid Mechanics II.
Introduction to concepts basic to current fluid mechanics research: hydrodynamic stability, the concept of average fluid mechanics, introduction to turbulence and to multiphase flow, wave motion, and topics in inviscid and compressible flow.
Spr ENGN2820 S01 25294 MWF 2:00-2:50(07) (S. Mandre)

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 is operated, breaking down the literal and figurative walls that separate basic scientists and clinical researchers. This course will integrate engineering, biomedical, and translational research.
Spr ENGN2910G 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 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 Biotransport), ENGN 1210 (Biomechanics) and ENGN 1490 (Biomaterials) or equivalents.
Spr ENGN2910S S01 25296 MWF 1:00-1:50(06) (L. 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(14) (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 analysis, layout design, and test tools 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 9:30-10:50(14) (R. Bahar)

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 TTh 9:00-10:20(08) (J. Rosenstein)

ENGN 2912R. Implantable Devices
This course will expose students to topics across the electrical and biological sciences through lectures and laboratory exercises. Students will learn basic governing concepts of implantable device design, including those of tissue interfaces, power delivery, data transmission, hermetic packaging and biocompatibility, and in vivo evaluation through appropriate animal models including design of surgical approach. Teams will be formed early in the course and maintained throughout the semester. Successful teams will invent, design, build, and implant their unique device. Teams will have access to the Technology Ventures Office through guest lectures and individual meetings.
Spr ENGN2912R S01 25298 TTh 10:30-11:50(09) (D. Borton)

The course will cover several topics concerning the mechanics that describe the motion of animals through fluids, ranging from swimming of bacteria and fish to the flight of insects and vertebrates. Topics: swimming of microorganisms in which flows are dominated by viscous stresses. Swimming of larger-scale animals such as fish in which the flow can be described by inviscid dynamics. Mechanics of flight include insects, birds, and bats. Course emphasis will be on fluid mechanics with aspects of fluid-solid interactions also covered, e.g., the behavior of flexible flagella. Experimental techniques for measurement of biological locomotion will also be discussed.
Fall ENGN2921 S01 17437 W 3:00-5:30(17) (K. Breuer)
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 ENGM2930 S01  25308  M  3:00-5:30(13)  (A. Van De Walle)

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 ENGM2970 S01  14975  Arranged  'To Be Arranged'
Spr ENGM2970 S01  24002  Arranged  'To Be Arranged'

ENGL 2980. Special Projects, Reading, and Design.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

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 ENGM2990 S01  14976  Arranged  'To Be Arranged'
Spr ENGM2990 S01  24003  Arranged  'To Be Arranged'

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, Lanier, 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.
Spr ENGL0100M S01  25716  MWF  1:00-1:50(06)  (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 those divisions? Readings by Woolf, Chandler, Wright, Cisneros, Smith, Calvino, Adiga, Whitehead.
Spr ENGL0100N S01  24485  TTh  9:00-10:20(01)  (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.
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, Warhol and Heijman, 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(05)  (S. Foley)

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 0150E. 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.
Spr ENGL0150E S01  24488  W  3:00-5:30(14)  (J. Kuzner)
ENGL 0150Q. 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 ENGL0150CS01 15575 TTh 10:30-11:50(13) (P. Armstrong)

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, Coné, Conrad, Faulkner, Greene, Ishiguro, Lessing, Morrison, Naipaul, Salih. Limited to 20 first-year students. DPLL FYS
Fall ENGL0150XS01 24489 TTh 9:00-10:20(01) (O. George)

ENGL 0200W. Tragic Variations: 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 1:00-1:50(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 24511 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 practices? Writers will likely include Baldwin, Brontë, Condé, Conrad, Faulkner, Greene, Ishiguro, Lessing, Morrison, Naipaul, Salih. Limited to 20 first-year students. DPLL FYS
Fall ENGL0200YS01 25143 MWF 10:00-10:50(03) (C. Grandy)

ENGL 0200Z. Who Are You to Judge? Modernist Fiction and Judgment.
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 twentieth-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
Fall ENGL0200ZS01 25142 MWF 11:00-11:50(04) (Z. Krowiak)

ENGL 0201A. Discourse/Intercourse: Recognizing Desire in Novels and Film.
Sexuality and sex are not the same, although they are often mistaken for one another. Focusing on realist fiction and media, psychoanalysis, and Marxist theory, this course investigates novels and films that leave something to be desired. Can art create a space for desire to exist? Works by: Foucault, Freud, Lacan, Althusser, Flaubert, Hardy, Barnes, Kubrick, Lynch, others. Enrollment limited to 17 undergraduate students. WRIT
Fall ENGL0201AS01 25683 MWF 12:00-12:50(05) (R. Ramamurthy)

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
Fall 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)
Fall 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.
Fall 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, Odysseus trying to sail home. 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 0511G. Introduction to Native and Indigenous Literatures.
This course will familiarize students with the study of Native and Indigenous literatures in North America. Focusing on a range of genres, geographic locations, and historical moments, students can expect to acquire both a working knowledge of the history of Native literatures in English and a critical methodological approach to the study of American literature.
Fall ENGL0511GS01 17486 TTh 2:30-3:50(03) (T. Warburton)

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
Fall ENGL0710QC01 24487 TTh 10:30-11:50(09) (R. Murray)
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 0930C. 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 1030D. 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 1030H. 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 1030J. Multimedia Nonfiction. 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 course 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. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1030K. Critical Reading and Writing II: 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 1030L. Writing in Place: Travel, Ecology, Locality. To explore the relationships among people, places and language, this course will incorporate science and nature writing, environmental / ecological writing, travel writing, psychogeography and architectural writing. Assignments and practices will include diaries, observational writing, reporting, criticism and more lyrical forms. Enrollment limited to 17. Writing sample may be required. 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 workshopping 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. Readey)

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

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 concentrators. S/NC.
Spr ENGL1160F S01 24500 M 3:00-5:30(13) (T. Breton)

ENGL 1180B. Digital Nonfiction.
In this class, we will join the host of other artists, activists, and writers that have used Twitter bots, iPhone apps, virtual reality experiences, and more to tell compelling stories. No previous digital writing experience is necessary, however, as an advanced creative nonfiction class, Digital Nonfiction requires students to have completed ENGL 0930 or any 1000-level nonfiction writing course. Enrollment is limited to 17. Instructor permission required. S/NC.
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 food 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 concentrators. Banner registrations after classes begin require instructor approval. S/NC.
Spr ENGL1180C S01 24506 MW 10:00-11:20(03) (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 workshopping 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 concentrators. Banner registrations after classes begin require instructor approval. S/NC.
Spr ENGL1180H S01 24497 Th 4:00-6:30(17) (J. Readey)

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 TTh 2:30-3:50(11) (C. Imbrigo)

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 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 T 4:00-6:30(09) (E. Rush)

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 15618 TTh 10:30-11:50(13) (S. Kastner)
Fall ENGL1190M S02 17532 TTh 1:00-2:20 "To Be Arranged"

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 MW 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 concentrators. S/NC.
Fall ENGL1190U S01 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. Class list reduced to 17 after writing samples are reviewed during first week of classes. No pre-requisites. Writing sample required. S/NC.

Spr ENGL1190V S01 24507 W 3:00-5:30(14) (K. Schapira)

ENGL 1190W. The Fiction of Nonfiction. Nonfiction texts are fictions in that they deploy the devices of fiction (pacing, voice, etc.), but even more so in that they are constructs (they’re in-formed and made up). In this seminar we will revel in the architectonic of good nonfiction writing. Upending the myth of “objectivity,” we will read as if writing mattered, and write as if reading did.

Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list reduced to 17 after writing samples are reviewed during first week of classes. Preference will be given to English concentrators. Banner registrations after classes begin require instructor approval. S/NC.

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 ENGL1310H S01 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 ENGL1310T S01 15580 TTh 1:00-2:20(10) (E. Bryan)

ENGL 1360H. Introduction to the Old English Language. This course offers a thorough introduction to the earliest period of English language and literature. We begin with an extensive coverage of grammar and syntax before reading short texts and a few Old English poems, including The Battle of Brunanburh and Judith. Enrollment limited to 20.

Fall ENGL1360H S01 17310 MWF 2:00-2:50(07) (L. Jacobs)

ENGL 1361G. Tolkien and the Renaissance. This course explores the work of J.R.R. Tolkien alongside Renaissance forebears 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 ENGL1361G S01 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 ENGL1361H S01 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 ENGL1510A S01 24494 TTh 10:30-11:50(09) (M. Rabb)

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 ENGL1511Y S01 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, Hampton. Theoretical readings by Berlant, Ellison, Terada, Deleuze, Stewart. Enrollment limited to 20 juniors and seniors.

Fall ENGL1560W S01 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 ENGL1561D S01 15584 T 4:00-6:30(09) (W. Keach)

ENGL 1580. Undergraduate Independent Study in the Enlightenment and the Rise of National Literatures. Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor's permission required.

ENGL 1710I. Harlem Renaissance: The Politics of Culture. The Harlem Renaissance was a remarkable flowering of culture in post-war 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 ENGL1710I S01 24495 TTh 2:30-3:50(11) (R. Murray)

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 embed 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, Salihi, Soyinka, Wicomb. Films by Blomkamp, Loreau, Sembène. DPLL

Spr ENGL1710J S01 24496 TTh 1:00-2:20(10) (O. George)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 ENGL1710K S01 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 ENGL1710L S01 25139 TTh 2:30-3:50(11) (T. Katz)

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, Cavell, Kuhn, Samuelsohn, Drucker, and Friedman. Enrollment limited to 20.
Spr ENGL1760U S01 25138 TTh 10:30-11:50(09) (D. Nabers)

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 ENGL1762C S01 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 aesthetic 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 ENGL1900Z S01 15589 Th 4:00-6:30(04) (P. Armstrong)

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 folktale 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 ENGL1950G S01 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 included: Morrison, Lee, Rushdie, Smith, Didion, Diaz, Pynchon, and Egan. Enrollment limited to 20 senior English concentrators. Others admitted by instructor permission only.
Spr ENGL1950H S01 24492 Th 4:00-6:30(17) (D. Nabers)

ENGL 1991L. 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.
Fall ENGL1991L S01 15592 M 3:00-5:30(15) (J. Egan)

ENGL 1992L. Senior Honors Thesis in English.
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 ENGL1992L S01 15592 Arranged (J. Egan)
Spr ENGL1992L S01 25490 Arranged (J. Egan)

ENGL 1993L. Senior Honors Seminar in Nonfiction Writing.
This course is designed for students accepted into the Nonfiction Writing 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 ENGL1993L S01 15600 F 3:00-5:30(11) (C. Imbriglio)

ENGL 1994L. Senior Honors Thesis in Nonfiction Writing.
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 ENGL1994L S01 15602 Arranged (C. Imbriglio)
Spr ENGL1994L S01 25491 Arranged (C. Imbriglio)

ENGL 2210L. 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 ENGL2210L S01 15557 F 10:00-12:30(14) (R. Reichman)

ENGL 2361A. Is There Renaissance Lyric?
Lyrical poetry, like the Renaissance, is a repeat offender: I had to do it. By examining inaugural forms—Sappho, Petrarch, Skelton, Spenser, Shakespeare, Donne, Jonson—alongside romantic and post/modernist understandings of lyric, we will display the pleasures of their differences, alternative theories of form, and work by W.R. Johnson, B. Johnson, Culler, R. Greene, Jackson, Prins, Jarvis, Scarry, Stewart. Enrollment limited to 15.
Spr ENGL2361A S01 24476 W 3:00-5:30(14) (S. Foley)

ENGL 2380L. Graduate Independent Study in Medieval and Early Modern Literatures.
Section numbers vary by instructor. May be repeated for credit. Instructor’s permission required.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 2450. Exchange Scholar Program.
Fall ENGL2450 S01 14972 Arranged "To Be Arranged"

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 ENGL2561JS01 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 ENGL2561QS01 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 (Lukács, Moretti, Armstrong, Pavel). Enrollment limited to 15.
Spr ENGL2561RS01 24477 Th 4:00-6:30(17) (B. Parker)

ENGL 2580. Graduate Independent Study in the Enlightenment and
the Rise of National Literatures.
Section numbers vary by instructor. May be repeated for credit. Instructor’s
permission required.

ENGL 2670M. 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,
globalism, and diaspora. Themes include: race, identity and subject-
position, and the problem of "literrature" itself, understood as mode of
tought and act of will. Readings will include: Césaire, Damroesch, Fanon,
Hall, Jameson, Naipaul, Said, Soyinka, Spivak, Walcott, Wright, Wynter.
Enrollment limited to 15.
Fall ENGL2670MS01 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 ENGL2761FS01 24478 T 12:00-2:30(10) (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 ENGL2761MS01 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.
"In Dostoevsky's polyphonic novel we are dealing not with ordinary
dialogic form...[but] 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 ENGL2901GS01 15568 F 3:00-5:30(11) (T. Bewes)

ENGL 2910. 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 ENGL2910S01 24480 M 3:00-5:30(13) (E. Rooney)

ENGL 2940. Scholarly Writing for Journal Publication.
Writing and professionalization workshop intended for graduate students
in literary studies. Topics covered include selection of journal; framing,
structuring and composition of the article; the logistics of peer review;
sharing and workshopping drafts; working with academic mentors and
advisors. Every passing student will have a publishable article under
consideration by the end of the semester. Enrollment limited to 12 English
Ph.D. students. Instructor permission required. S/NC.
Fall ENGL2940 S01 17301 Th 9:30-12:00(08) (T. Bewes)

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 writing and writing.
Emphasizes the practice of writing, including syllabus design. Enrollment
restricted to students in the English Ph.D. program.
Fall ENGL2950 S01 15603 T 12:00-2:30(10) (J. Read)

ENGL 2967. 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 ENGL2967 S01 14976 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 ENGL2990S01 14974 Arranged "To Be Arranged"

Enrollment numbers vary by instructor, may be repeated for credit. Instructor’s
permission required.
ENVS 0490. 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.
Spr ENVS0705 S01 25056 TTh 9:00-10:20(01) (J. Roberts)

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).
Spr ENVS1350 S01 25711 TTh 2:30-3:50(11) (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.

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<th>Fall</th>
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**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).

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<tr>
<th>Fall</th>
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<th>S01 24661</th>
<th>TTh 1:00-2:20(10)</th>
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**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

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<tr>
<th>Fall</th>
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<th>S01 16089</th>
<th>M 3:00-5:30(15)</th>
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**ENVS 1580. Environmental Stewardship and Resilience in Urban Systems.**

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.

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<th>Spr</th>
<th>ENVS1580</th>
<th>S01 24470</th>
<th>TTh 10:30-11:50(09)</th>
<th>(K. Teichert)</th>
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**ENVS 1615. Making Connections: The Environmental Policy Process.**

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

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<tr>
<th>Fall</th>
<th>ENVS1615</th>
<th>S01 15521</th>
<th>M 3:00-5:30(15)</th>
<th>(A. Lynch)</th>
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**ENVS 1910. The Anthropocene: The Past and Present of Environmental Change.**

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

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<th>Spr</th>
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<th>S01 24469</th>
<th>Th 4:00-6:30(17)</th>
<th>(B. Demuth)</th>
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**ENVS 1920. Methods for Interdisciplinary Environmental Research.**

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

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<tr>
<th>Fall</th>
<th>ENVS1920</th>
<th>S01 15531</th>
<th>TTh 1:00-2:20(10)</th>
<th>(L. Vanwey)</th>
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**ENVS 1925. Energy Policy and Politics.**

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

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<tr>
<th>Spr</th>
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<th>S01 24468</th>
<th>M 3:00-5:30(13)</th>
<th>(D. King)</th>
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**ENVS 1970. Independent Study.**

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.

**ENVS 1971. Independent Study.**

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.
Fall FREN 0100 S01 15624 MF 9:00-9:50(04) (A. Wiert)
Fall FREN 0100 S01 15624 TTh 1:00-2:20(04) (A. Wiert)
Fall FREN 0100 S02 15625 MF 10:00-10:50(04) (A. Wiert)
Fall FREN 0100 S02 15625 TTh 10:30-11:50(04) (A. Wiert)
Fall FREN 0100 S03 15626 TTh 9:00-10:20(04) (A. Wiert)
Fall FREN 0100 S03 15626 MF 11:00-11:50(04) (A. Wiert)
Fall FREN 0100 S05 15628 TTh 10:30-11:50(04) (A. Wiert)
Fall FREN 0100 S05 15628 MF 1:00-1:50(04) (A. Wiert)

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.
Spr FREN 0200 S01 24522 MF 9:00-9:50(17) (A. Wiert)
Spr FREN 0200 S01 24522 TTh 10:30-11:50(17) (A. Wiert)
Spr FREN 0200 S02 24523 MF 9:00-9:50(17) (A. Wiert)
Spr FREN 0200 S02 24523 TTh 1:00-2:20(17) (A. Wiert)
Spr FREN 0200 S03 24524 MF 11:00-11:50(17) (A. Wiert)
Spr FREN 0200 S03 24524 TTh 1:00-2:20(17) (A. Wiert)
Spr FREN 0200 S04 24525 TTh 10:30-11:50(17) (A. Wiert)
Spr FREN 0200 S04 24525 MF 12:00-12:50(17) (A. Wiert)
Spr FREN 0200 S05 24526 TTh 9:00-10:20(17) (A. Wiert)
Spr FREN 0200 S05 24526 MF 1:00-1:50(17) (A. Wiert)

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.
Fall FREN 0300 S02 15725 TTh 9:00-10:20(15) (A. Wiert)
Fall FREN 0300 S02 15725 MF 11:00-11:50(15) (A. Wiert)
Fall FREN 0300 S03 15726 MF 12:00-12:50(15) (A. Wiert)
Fall FREN 0300 S03 15726 TTh 1:00-2:20(15) (A. Wiert)

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.
Fall FREN 0400 S01 15634 MWF 9:00-9:50(15) (A. Wiert)
Fall FREN 0400 S02 15635 MWF 10:00-10:50(15) (A. Wiert)
Spr FREN 0400 S01 24528 MWF 9:00-9:50(16) (Y. Kervennic)
Spr FREN 0400 S02 24529 MWF 10:00-10:50(16) (Y. Kervennic)
Spr FREN 0400 S03 24530 MWF 12:00-12:50(16) (Y. Kervennic)

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.
Fall FREN 0500 S01 15640 MWF 10:00-10:50(15) (J. Izzo)
Fall FREN 0500 S02 15641 MWF 11:00-11:50(15) (J. Izzo)
Fall FREN 0500 S03 15642 MWF 12:00-12:50(15) (J. Izzo)
Spr FREN 0500 S01 24532 MWF 10:00-10:50(13) (J. Iizzo)
Spr FREN 0500 S02 24536 MWF 12:00-12:50(13) (J. Izzo)
Spr FREN 0500 S03 24537 MWF 2:00-2:50(13) (J. Izzo)

FREN 0600. Writing and Speaking French II.
Prerequisite for study in French-speaking countries. 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. WRIT
Fall FREN 0600 S01 15644 MWF 9:00-9:50(04) (S. Ravillon)
Fall FREN 0600 S02 15645 MWF 11:00-11:50(04) (S. Ravillon)
Fall FREN 0600 S03 15646 MWF 1:00-1:50(04) (S. Ravillon)
Fall FREN 0600 S04 15653 MWF 2:00-2:50(04) (S. Ravillon)
Spr FREN 0600 S01 24539 MWF 9:00-9:50(16) (S. Ravillon)
Spr FREN 0600 S02 24542 MWF 11:00-11:50(16) (S. Ravillon)
Spr FREN 0600 S03 24545 MWF 1:00-1:50(16) (S. Ravillon)

FREN 0620. Writing and Speaking French II: Literature.
Prerequisite for study in French-speaking countries. Continuation of FREN 0500. Class time is devoted mainly to conversation and discussion practice. Same level as FREN 0600. This course is designed for students who are interested in literature. Discussions and writing assignments are based on a selection of literary texts from the Francophone world and introduce students to the analysis of literature. Prerequisite: FREN 0500. Enrollment limited to 18. WRIT
Spr FREN 0620 S01 24546 MWF 2:00-2:50(07) "To Be Arranged"

FREN 0720D. Contes et identités francophones.
An introduction to the French-speaking world through folk- and fairy tales, we will examine how folktales have been used to define national and ethnic identities in France, Sénégal, the Caribbean, Louisiana, and Canada and consider how the study and rewriting of these traditions have redefined these identities. We will explore these questions by studying tale-types from all of the above regions, tales specific to each, and literary reworkings of folktales by writers, including d’Aulnoy, Perrault, Nothomb, Ben Jelloun, Diop, and Chamoiseau. Prerequisites: 5 on Advanced Placement testing, 700 and above SAT II, or instructor’s permission. Taught in French. FYS WRIT
Fall FREN 0720DC S01 17306 MWF 11:00-11:50(16) (L. Seifert)

FREN 0750G. L’animal dans la culture contemporaine.
From reports of animals stranded in conflict zones and natural calamities, to cute or clever animals cast in advertisements and popular media, from the rat of Ratafouille to the caged orangutan of Nénette, the new interest in the animal marks an age of heightened awareness of the costs and ironies of the human story. We will consider in this course significant representations of the animal in contemporary French and Francophone literature, film, visual art, cultural theory and media representations. We will also revisit earlier moments linking the animal to modernity, including early film/photography and urban history. Taught in French. WRIT
Fall FREN 0750GCS01 17418 MWF 1:50-1:50(06) (T. Ravidranathan)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 Spr FREN0760A S01 24640 MWF 2:00-2:50(07) (T. Ravindranathan)

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. WRIT Fall FREN1020A S01 15693 TTh 10:30-11:50(13) (O. Mostefai)

FREN 1050F. Espace public; espace privé.
This course will study the interpretation 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 Crebillon fils, Denon, Bastide, Diderot, Mme de Charnière, Rutledge, Palissot. WRIT Spr FREN1050F S01 24620 T 4:00-6:30(16) 'To Be Arranged' (G. Schultz)

FREN 1060E. Genre, sexualité, et le roman du XIXe siècle.
Examines novelistic constructions of gender and sexuality in relation to 19th-century French culture and literary movements, including romanticism, realism and naturalism, decadence, and the popular novel. Topics include constructions of homosexuality in literature and non-fiction, fatal femininity, besieged masculinity, sexuality and race, prostitution, bored housewives. Works by Balzac, Flaubert, Zola, Maupassant, Rachilde, accompanied by non-fictional sources in early sexology and criminology. 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. WRIT Fall FREN1060E S01 16811 TTh 1:00-2:20(10) (G. Schultz)

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 Maurvignier. 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 600- or 700-level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown. WRIT Spr FREN1110F S01 24639 MWF 12:00-12:50(05) (T. Ravindranathan)

FREN 1120F. L'enfer, c'est les autres.
In this course we will read a selection of plays by notable 20th century French and Francophone writers, and consider how the dramatic form organizes and complicates questions of representation, subjectivity, body, politics and voice. Authors include Sartre, Camus, Genet, Beckett, Césaire, Koltès, Duras, Sarratte, NDiaye, Redonnet. Secondary readings by Adorno, Deleuze, Kristeva amongst others. Taught 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. WRIT Fall FREN1120F S01 17559 M 3:00-5:30(15) (T. Ravindranathan)

FREN 1130G. Modernismes poétiques.
Poetry begins with (more) white space on the page. The modernist remaking of poetry - beginning somewhere in the second half of the 19th century and lasting more or less through the first half of the 20th - brought about an exponential increase in the volume of that space, and in various other extensions of it (e.g. into design and drawing, into the unconscious). The course will follow those transformations by reading poems and other writings by selected poets from Rimbaud and Mallarmé to the surrealists and Porche. Taught 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. WRIT Fall FREN1130G S01 16810 W 3:00-5:30(17) (D. Wills)

"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 production" against the reality of corporate necessity and new forms of media. Taught in English. WRIT Fall FREN1150G S01 15814 TTh 2:30-3:50(03) (D. Wills)

FREN 1310M. Le fantastique. 
Ghosts, spirits and specters populate the French "fantastique." Starting with the precursors of the genre in the 18th century (Jacques Cazotte's Le Diable amoureux), we will read major works of "littérature fantastique" of the 19th century, including Balzac's La Peau de chagrin (1831), Contes cruels by Villiers de l'Isle-Adam (1883) and Maupassant's Le Horla (1886). Select readings from critical theory and philosophy will accompany the readings (Todorov, Bergson, Derrida). We will also consider examples of the fantastic in 20th century cinema (Epstein's La Chute de la Maison Usher (1928) and Franju's Les Yeux sans visage (1960). Taught 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. WRIT Fall FREN1310M S01 17516 T 4:00-6:30(09) (L. Odello)

FREN 1410L. 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 theory. 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. Taught 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. WRIT Spr FREN1410L S01 24646 TTh 2:30-3:50(11) (V. Krause)
**FREN 1410T. L'expérience des réfugiés/immigrés.**
An exploration of the experience of refugees and immigrants with two components. The first component consists of close study of the French context from Decolonization up through the current refugee crisis based on literature, film, the press, and critical essays. The second component of this course will give students the opportunity to work with refugee/recent immigrant communities in Providence. This is a community-engaged course requiring substantial commitment beyond the classroom. 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

Fall  FREN1410T S01 16812 F 3:00-5:30(11) (V. Krause)

**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 (extracts 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

Fall  FREN1510A S01 16084 MW 12:00-12:50(12) (S. Ravillon)

**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

Spr  FREN1510C S01 24621 TTh 1:00-2:20(10) (A. Wiart)

**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

Spr  FREN1510H S01 24638 MWF 10:00-10:50(03) (S. Ravillon)

**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 24834 MWF 11:00-11:50(04) (Y. Kervennic)

**FREN 1710E. Machines de guerre: Violence et société en Afrique francophone.**
From civil war in Ivory Coast to terrorism in Mali, war and violence in Francophone Africa both provoke and respond to debates about France’s colonial legacy and continued presence on the continent. Yet these phenomena have much to tell us about emerging social relations, new forms of politics, and how ordinary Africans view the future—their own, that of their countries, and of the continent as a whole. This course studies these and related questions in a variety of media, including anthropological texts, written testimonies, novels, documentary films, philosophy, and investigative journalism. Anglophone Africa will also be considered. Taught 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. WRIT

Spr  FREN1710E S01 25524 MW 1:00-1:50(06) (J. Izzo)

**FREN 1900K. Extrême droite en France.**
Studies the rise of far-right tendencies (nationalism, anti-Semitism, racism, Islamophobia, homophobia) in France from the 3rd Republic to today. Topics covered include the Dreyfus Affair, the Vichy regime, the Front national. While the main focus is on France, we will also give comparative consideration to questions related to political extremism that resonate in the US and other European nations, such as national identity, populism, immigration, exclusion, religious intolerance. This course will draw on a variety of sources, fictional and non-fictional, including print journalism, novels, historical essays, and film. For senior French Studies concentrators; instructor permission required for others. In French. WRIT

Spr  FREN1900K S01 25525 F 3:00-5:30(15) (G. Schultz)

**FREN 1970. Individual Independent Study.**
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.

**FREN 1990. Senior Thesis.**
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, Galland, Marie de l’Incarnation, Les Mille et une nuits, Molière, 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  FREN2150ES S02 24643 M 3:00-5:30(13) (O. Mostefai)
FREN 2170M. L’Art de l’excès.
This seminar considers the late 19th-century idea of decadence, understood as extravagant reaction to perceived social dissipation and political decline. We will focus on the esthetics, politics, and practices of excess in fin-de-siècle fiction. Topics include: decadent estheticism, proto-fascism, altered states, and non-normative sexualities. Authors include Eekhound, Lorrain, Huysmans, Péladan, Rachilde, Lemonnier, Vivien. Fictional texts will be accompanied by contemporary non-fictional sources (Nordau, Bourget, Kraft-Ebbing, Lombroso). Taught in French.
Fall FREN2170M S01 16235 W 3:00-5:30(17) (G. Schultz)

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, Derida, Deleuze, Foucault and others. Taught in French.
Spr FREN2600L S01 24637 W 3:00-5:30(14) (D. Wills)

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.
Fall FREN2990 S01 14979 Arranged "To Be Arranged"
Spr FREN2990 S01 24006 Arranged "To Be Arranged"

FREN XLIST. Courses of Interest to French Concentrators.
Fall 2017
The following courses may be of interest to French concentrators. Please see the sponsoring department for the time and location of each course.
Cogut Center for Humanities
HMAN 2971D Caring for the Truth
Comparative Literature
COLT 1814T Maghrebi Fiction and Psychoanalysis

Gender and Sexuality Studies

GNSS 0090C. Reproductive Health: Science and Politics.
Reproductive health issues such as contraception, abortion, sexually transmitted infections and gay and lesbian health are some of the most controversial and politically charged issues in the US today. After an introduction to the interpretation of medical literature we will explore scientific, political, religious and cultural aspects of these important public policy issues. Successful national and international programs will be discussed. Although all views are welcome, it is expected that students will be respectful of other’s opinions and will incorporate the best available scientific data into their conclusions. Enrollment limited to 20 first year students. Instructor permission required. FYS DPLL WRIT
Spr GNSS0090C S01 25929 M 3:00-5:30(13) "To Be Arranged"

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 16796 M 3:00-5:30(15) (P. 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 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.

GNSS 1820. 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.

GNSS 1961G. Framing Gender in Middle Eastern Cinema.
This course examines how gender is framed in Middle Eastern cinema. Through weekly readings in film theory and culture, in-class discussion, and written and oral assignments, students will learn not only how to analyze cinema but also about gender in the modern and contemporary Middle East more generally. Most weeks students will also attend the screening of a film dealing in some way with gender in the Middle East. We will watch films from or about: Iran, Afghanistan, Egypt, Tunisia, Palestine, Iraq, Lebanon, and Canada. DPLL
Fall GNSS1961G S01 17488 Th 4:00-6:30(04) (T. Thompson)

Did you know that Robinson Crusoe was critical for the drafting of the "Universal Declaration of Human Rights"? Or that autobiography has been a literary genre crucial for the articulation and propagation of both human and civil rights? Through a study of the relationship between human rights and literature, this course will explore forms of writing that enable the legal protocols, proceedings, and predicaments that make up human rights discourse. We will pair key human rights documents with literary and cinematic works that inspire and question the universal ideals of the law.

DPLL Fall GNSS1961H-S01 17487 W 3:00-5:30(17) (A. Gunaratne)


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(03) (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(14) (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(03) (L. Gandhi)

GNSS XLIST. Courses of Interest to Concentrators in Gender and Sexuality Studies.

Fall 2017

The following courses have a primary focus on women or gender or make significant use of modes of feminist or queer analysis. They may count toward the concentration in Gender and Sexuality Studies. Please check with the sponsoring department for times and locations.

English
ENGL 1510A Jane Austen and Her Predecessors
History
HIST 1964D Women in Early Modern England

Geological Sciences

GEOL 0070. Introduction to Oceanography.

Examines the ocean's role in Earth's global environment, emphasizing the dynamical interaction of the ocean with the atmosphere, biosphere, cryosphere, and lithosphere. Focus on physical/chemical/biological systems' interconnections needed to understand natural and anthropogenic variability on various time and space scales, from El Niño to global warming. Three lectures, written exercises on oceanographic problems; two field trips to study estuarine and coastal processes.

Spr GEOL0070 S01 25919 MWF 2:00-2:50(07) (S. Clemens)

GEOL 0160E. Volcanos, Windows into the Deep Earth.

Examines the physical and chemical principles controlling the generation of volcanoes and their different styles of eruption. Investigates where and why volcanoes occur, and what volcanic lavas can tell us about the composition and evolution of the Earth and other planets. Evaluates volcanic hazards and their environmental impacts and the economic benefits and cultural aspects of volcanism. Two-day field trip. Enrollment limited to 20 first year students. FYS

Fall GEOL0160E-S01 16936 TTh 10:30-11:50(13) (A. Saal)

GEOL 0220. Physical Processes in Geology.

Introduction to the physical and chemical processes that shape the Earth’s surface, govern the structure of its interior, cause natural hazards and affect the human environment. Topics include interior processes (plate tectonics, mountain building, volcanism, earthquakes, and flow of solid rocks) and environmental processes (climate, atmospheric and oceanic circulation, flow of rivers, glaciers, and groundwater). Four labs and two field trips arranged. Intended for science concentrators or those wishing in-depth treatment. CAP course. Enrollment limited to 100. After pre-registration, instructor permission is required to register or get on wait-list. Please see or email instructor (Jan_Tullis@brown.edu).

Fall GEOL0220 S01 16932 MWF 11:00-11:50(16) (J. Tullis)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GEOL 0230. Geochmstry: Earth and Planetary Materials and Processes. Introduction to the chemical and mineralogical nature of the Earth, Moon, and meteorites, and the role of chemical processes in their evolution. Topics include: composition of rock-forming minerals; origin of crustal and mantle rocks; stable and radiogenic isotopes; models of nucleosynthesis, planet formation and differentiation. Weekly laboratory and two field trips. Intended for science concentrators. Prerequisites: basic chemistry and GEOL 0010 or 0050 or 0220, or instructor permission. Labs will meet Tuesdays from 7:00 pm to 9:00 pm. Spr GEOL0230 S01 25792 TTh 1:00-2:20(10) (A. Saal)

GEOL 0240. Earth: Evolution of a Habitable Planet. Introduces Earth's surface environment evolution - climate, chemistry, and physical makeup. Uses Earth's carbon cycle to understand solar, tectonic, and biological cycles' interactions. Examines the origin of the sedimentary record, dating of the geological record, chemistry and life on early Earth, and the nature of feedbacks that maintain the "habitable" range on Earth. Two field trips; five laboratories arranged. Prerequisite: GEOL 0220 or 0230, or instructor permission. WRIT Spr GEOL0240 S01 25790 MWF 11:00-11:50(04) (T. Herbert)

GEOL 0250. Computational Approaches to Modelling and Quantitative Analysis in Natural Sciences: An Introduction. Application of numerical analysis to mathematical modelling in the natural sciences including topics such as ground water and glacier flow, earthquakes, climate models, phase equilibrium, and population dynamics. Numerical methods will include the solution of linear algebraic systems of equations, numerical integration, solution of differential equations, time series analysis, statistical data analysis tools. Development of computer programming skills in the Matlab programming environment. Suggested prerequisites: MATH 0090, 0100; PHYS 0030, 0040, or 0050, 0060. Fall GEOL0250 S01 16960 MWF 10:00-10:50(14) (C. Huber)

GEOL 1240. Stratigraphy and Sedimentation. Introduction to depositional environments and processes responsible for formation of sedimentary rocks. Major sedimentary environments in the Recent are discussed, general models are proposed, and stratigraphic sequences in older sediments are examined in the light of these models. The Phanerzoic stratigraphic record is examined from the perspective of Earth system history. Laboratory arranged. Prerequisites: GEOL 0220 or 0240, or instructor permission. GEOL 0310, 1410 are also recommended. WRIT Fall GEOL1240 S01 16924 TTh 10:30-11:50(13) (J. Russell)

GEOL 1320. Introduction to Geographic Information Systems for Environmental Applications. Introduction to the concepts of geospatial analysis and digital mapping. The principles of spatial data structures, coordinate systems, database development and design, and techniques of spatial analysis are learned. This is an applied course, primarily using ESRI-based geographic information system software. Focal point of class is the completion of student-selected research project employing GIS methods. Enrollment limited to 10 in each section. Permission by an application provided by the instructor (to be requested through email). S/NC. Fall GEOL1320 S01 16930 Arranged (L. Carlson) Fall GEOL1320 S02 16931 Arranged (L. Carlson)

GEOL 1330. Global Environmental Remote Sensing. Introduction to physical principles of remote sensing across electromagnetic spectrum and application to the study of Earth’s systems (oceans, atmosphere, and land). Topics: interaction of light with materials, imaging principles and interpretation, methods of data analysis. Laboratory work in digital image analysis, classification, and multi-temporal studies. One field trip to Block Island. Recommended preparation courses: MATH 0090, 0100; PHYS 0060; and background courses in natural sciences. Spr GEOL1330 S01 25941 MWF 2:00-2:50(07) (J. Mustang)

GEOL 1350. Weather and Climate. Weather phenomena occur on short time scales, and form the basis for understanding climate, the study of changes over longer time scales. This course aims to provide an understanding of the processes that drive weather patterns, the general circulation of the atmosphere, and climate on Earth. Topics include: structure and composition of the atmosphere; sources of energy driving atmospheric processes; weather forecasting; the hydrological cycle; the forces that create severe weather, the influence of humans on the atmosphere; and factors that influence climate, climate variability and climate change. MATH 0090, 0100; PHYS 0050, or equivalent recommended. Enrollment limited to 30. WRIT Spr GEOL1350 S01 25942 TTh 2:30-3:50 (M. Hastings)

GEOL 1370. Environmental Geochemistry. The course will examine the biogeochemical cycling, fate and transport of chemicals in the atmospheric and aquatic environments. Topics such as chemical weathering, natural water pollution and remediation, acid deposition, global warming and air pollution will be examined through natural ecosystem examples from rivers, lakes, estuaries, and ocean. Field trips and laboratory arranged. Prerequisites: CHEM 0100 or 0330, or instructor permission.

GEOL 1410. Mineralogy. Introduction to mineralogical processes on Earth's surface and its interior. Topics include crystallography, crystal chemistry, nucleation, crystal growth, biomineralization, environmental mineralogy, and mantle mineralogy. Laboratory study devoted to optical identification of rock-forming minerals. Prerequisites: GEOL 0230, CHEM 0100 or 0330, or equivalent.

GEOL 1430. Principles of Planetary Climate. This course provides the physical building blocks for understanding planetary climate. Topics include thermodynamics applied to planetary atmosphere, basic radiative transfer, energy balance in the atmosphere, and climate variability. In-class exercises and homework problems are designed to strengthen the understanding of basic concepts and to improve problem-solving skills.

GEOL 1450. Structural Geology. Introduction to the geometry, kinematics and mechanics of rocks deformed by brittle fracture or faulting and ductile solid state flow, on scales from microscopic to mountain ranges. The emphasis is on using concepts to interpret the formation, strain history and rheology of deformed rocks in terms of the operative grain-scale processes, material properties and environmental conditions. Weekly 2 hour lab involving hands-on experience closely related to class topics. Two field trips. Prerequisites: GEOL 0220 or 0240 or instructor permission. WRIT Spr GEOL1450 S01 25943 TTh 10:30-11:50(09) (J. Tullis)

GEOL 1510. Introduction to Atmospheric Dynamics. The objective of GEOL1510 is to understand the fundamental physical principles that govern the motion of the atmosphere. Students will explore the dynamics of the atmosphere and the mathematical laws governing weather and climate. Topics include the fundamental equations of motion in rotating fluids, hydrostatic, geostrophic and thermal wind balance, and vorticity, as applied to phenomena, including sea breezes, planetary waves, midlatitude cyclones, fronts, and the global general circulation. The emphasis will be on physical interpretation of the equations but facility with vector calculus is critical. Enrollment limited to 30. Spr GEOL1510 S01 25944 MWF 10:00-10:50(03) (A. Lynch)

GEOL 1610. Solid Earth Geophysics. A survey of basic geophysical techniques for determining the structure and dynamics of Earth's interior. Topics include: global structure from seismic waves; gravity, magnetic field, and shape of the Earth; thermal processes within the Earth; structure of continental and oceanic lithosphere. Recommended courses: GEOL 0220, PHYS 0470, APMA 0330. No prerequisites.

Fall GEOL1610 S01 16961 TTh 1:00-2:20(10) (C. Dalton)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GEOL 1615. The Environmental Policy Process.
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. WRT
Fall GEOL1615 S01 16928 M 3:00-5:30(15) (A. Lynch)

Geologic applications of remotely sensed information derived from interaction of electromagnetic radiation (X-ray, gamma-ray, visible, near-IR, mid-IR, radar) with geologic materials. Applications emphasize remote geochemical analyses for both terrestrial and extraterrestrial environments. Several spectroscopy and image processing labs. GEOL 1410 (or equivalent recommended) or permission of instructor required. Enrollment limited to 20.
Fall GEOL1710 TTh 2:30-3:50(03) (R. Miliken)

Examines the processes, dynamics, and consequences of geoenvironment, or intentional climate intervention, approaches to controlling climate change. Through assignment students will create a series of referenced, researched, public Wikipedia pages summarizing the state of the art understanding (i.e., a geoenvironment hackathon). Intended for undergraduate and graduate students with interests in oceans, climate, paleoclimate, engineering, and climate change policy. Pre-requisite: GEOL 0240 or ENVS 0490 or GEOL 1350 recommended; permission of instructor required. Enrollment limited to 30.
Fall GEOL1950M S01 17120 TTh 2:30-3:50(03) (F. Fox-Kemper)

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.

Emphasizes kinetic theories and their geological applications. Topics include: rate laws of chemical reaction, rates of chemical weathering; fundamentals of diffusion, nucleation, crystal growth, and dissolution; transport theory. Recommended prerequisite: GEOL 2460 or equivalent.
Fall GEOL2410 S01 17096 Arranged (Y. Liang)

GEOL 2450. Exchange Scholar Program.

GEOL 2920H. Past Variations in the Global Carbon Cycle.
This course will examine variations in the earth’s carbon cycle over multiple time scales. We will examine geological tools that measure rates of carbon storage and release, especially over the past one million years. Special emphasis will be given to monitoring rates of past biological carbon storage.
Fall GEOL2920H S01 17132 W 3:00-5:30(17) (T. Herbert)

GEOL 2920K. Special Topics in Geological Sciences: The Hydrological Cycle on Mars.
Evidence for the changing hydrological cycle on Mars, ranging from what appears to be an early warm and wet Mars, through history to the present very cold polar desert Antarctic-like environment will be examined. Ongoing rover exploration of Mars will be followed to assess what these new results are telling us about the hydrological cycle.
Fall GEOL2920K S01 17187 W 3:00-5:30(17) (J. Head)

GEOL 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.

GEOL 2980. Research in Geological Sciences.
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 for a thesis.
Fall GEOL2990 S01 14981 Arranged (To Be Arranged)
Spring GEOL2990 S02 24008 Arranged (To Be Arranged)

German Studies

German Studies

GRMN 0100. Beginning German.
A course in the language and cultures of German-speaking countries. Four hours per week plus regular computer and listening comprehension work. At the end of the year, students will be able to communicate successfully about everyday topics. 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 GRMN 0200 covers the entire year and is recorded as the final grade for both semesters.
Fall GRMN0100 S01 16665 MWF 9:00-9:50(01) (J. Sokolosky)
Fall GRMN0100 S02 16665 T 12:00-12:50(01) (J. Sokolosky)
Fall GRMN0100 S02 16671 MWF 11:00-11:50(16) (J. Sokolosky)
Fall GRMN0100 S02 16671 T 12:00-12:50(16) (J. Sokolosky)
Fall GRMN0100 S03 16672 MWF 12:00-12:50(12) (J. Sokolosky)
Fall GRMN0100 S03 16672 T 12:00-12:50(12) (J. Sokolosky)
Fall GRMN0100 S04 16673 T 12:00-12:50(06) (J. Sokolosky)
Fall GRMN0100 S04 16673 MWF 1:00-1:50(06) (J. Sokolosky)
Spring GRMN0110 S01 25537 MWF 1:00-1:50(06) (J. Sokolosky)
Spring GRMN0110 S01 25537 MWF 2:00-2:50(06) (J. Sokolosky)

GRMN 0200. Beginning German.
A course in the language and cultures of German-speaking countries. Four hours per week plus regular computer and listening comprehension work. At the end of the year, students will be able to communicate successfully about everyday topics relating to the university, jobs, daily life and traveling. Ideal for undergraduate students interested in learning German for study abroad or for concentration requirements and for graduate students interested in starting their foreign language requirements. The course is designed for new students of German, regardless of any previous experience with German.
Spring GRMN0200 S01 25331 MWF 9:00-9:50(16) (J. Sokolosky)
Spring GRMN0200 S01 25331 T 12:00-12:50(16) (J. Sokolosky)
Spring GRMN0200 S02 25332 MWF 11:00-11:50(16) (J. Sokolosky)
Spring GRMN0200 S02 25332 T 12:00-12:50(16) (J. Sokolosky)
Spring GRMN0200 S03 25333 MWF 12:00-12:50(16) (J. Sokolosky)
Spring GRMN0200 S03 25333 T 12:00-12:50(16) (J. Sokolosky)

GRMN 0300. Intermediate German I.
Focuses on deepening students’ understanding of modern German culture by reading texts and viewing films pertinent to Germany today. Intended to provide a thorough review of German grammar and help students develop their writing, reading, listening, and speaking skills. Frequent writing assignments. Four hours per week. Recommended prerequisite: GRMN 0200.
Fall GRMN0300 S01 16674 MWF 10:00-10:50(14) (J. Sokolosky)
Fall GRMN0300 S01 16674 Th 12:00-12:50(14) (J. Sokolosky)
Fall GRMN0300 S02 16678 Th 12:00-12:50(06) (J. Sokolosky)
Fall GRMN0300 S02 16678 MWF 1:00-1:50(06) (J. Sokolosky)
An intermediate German course that stresses improvement of the four language skills. Students read short stories and a novel; screen one film; maintain a blog in German. Topics include German art, history, and literature. Frequent writing assignments. Grammar review as needed. Four hours per week. Recommended prerequisite: GRMN 0300. WRIT

GrMN 0400. Intermediate German II.

Fall MWF 10:00-10:50 (14) J. Sokolosky
Th 12:00-12:50 (12) J. Sokolosky

GrMN 0500F. Twentieth-Century German Culture.

A broad exploration of twentieth-century German culture using many kinds of written and visual texts (e.g. literature, journalism, film, art). While continuing to work on all four language skills (speaking, listening, reading, writing) students will gain more intensive knowledge about German culture, society, and history. In German. Recommended prerequisite: GrMN 0400. WRIT

GrMN 0600B. Was ist Deutsch?.

In this course we will examine some of the ideas and myths that became entangled with the emerging notion of a “German” identity in the eighteenth and nineteenth centuries. Some of the terms that we will discuss include Kultur, Bildung, Freiheit and Gesellschaft, all of which have rich semantic histories. Conducted in German. Recommended prerequisite: one course in the GrMN 0500 series. WRIT

GrMN 0750F. Historical Crime Fiction.

There is almost no time period that has not been covered by historical crime fiction. From ancient Egypt and Rome to 18th century China, historical crime fiction has complemented and contested our knowledge of history. In this seminar, we will do some extensive time travel and explore how crime fiction explores the past and challenges our understanding of bygone times. Readings of texts by Ellis Peters, Umberto Eco, Peter Tremayne, Lindsey Davis, Alan Gordon, Robert van Gulik, Laura Rowland, among others. FYS WRIT

GrMN 1320C. Goethe’s Children.

The name “Goethe” looms large over modern German literature, but what are founding figures without the daughters and sons that question and challenge their authority? This course offers a broad introduction to Goethe’s life and works, focusing on themes and questions of youth and childhood in his writings. Readings include canonical works such as The Sorrows of Young Werther, Iphigenia in Tauris, Wilhelm Meister’s Apprenticeship, Faust, and Elective Affinities. We will also examine Goethe’s legacy by looking at musical, theatrical, and philosophical responses to images of youth and childhood in his works. [Taught in German; all students welcome.]

GrMN 1320D. Freudian Inspirations: Psychoanalysis and the Arts.

This course engages with the central concepts and motifs of Freud’s psychoanalytic theory and how they relate to works of literature, art, and film. What do Sophocles, Ovid, and Hoffmann tell us when we read Oedipus Rex, The Metamorphoses, and The Sandman today? How does our understanding of these texts differ from or resemble Freud’s reading of them? And when we engage art that cites psychoanalytic concepts—such as Hitchcock’s and Lars von Trier’s Melancholia—do we recognize the Freud we encounter in our readings of his own texts? (In English; all students welcome)

GrMN 1440G. Talking Animals and the Politics of World Literature.

We have encountered talking animals within literature for over four thousand years. Alongside the Fables of Aesop, there are comparable animal stories from Ancient Babylon, Egypt, and from the Indian-Arabian-Persian cultural space, whose distribution was just as far-reaching. Animal fables appear easy to understand and universally valid. But do we really understand what it means when animals talk in texts? This course will employ current approaches to human-animal-studies alongside concepts of world literature to examine why animals are made to talk, what functions animal stories have, and what the conditions for their dissemination are. [In English; all Brown students welcome.]

GrMN 1440S. Grimm’s Fairy Tales.

“One doesn’t know the sorts of things one has in one’s house,” says the servant girl in Kafka’s “A Country Doctor,” as a stranger, who will soon act violently towards her, emerges on all fours from an unused sty. The precarious moment of finding more than one seeks in one’s midst is among the key motifs of Grimms’ “Household Tales” that we will trace, following the way they move writers of literature, psychoanalysis, and critical theory. Reading the Grimms among others, we will find: what was “once upon a time” is not finished, nor can these uncanny tales be domesticated.

GrMN 1440U. Armut / Poverty.

Literature written by migrants and their descendants has become a vital part of post-war German language and culture. Since the arrival of the so-called guest workers in the 1950s, the Jewish immigrants from the former Soviet Union during the 1990s, and recent Syrian refugees, Germany has become an “Einwanderungsland” (a country of immigration) and an increasingly multicultural society. This has triggered anxieties and phobias, exploited by populist politicians and movements, but it has also profoundly changed the literary landscape. The class will explore the contributions of authors such as Rafik Schami, Feridun Zaimoglu, Emine Özdamar, Zafer Senocak, and others.

GrMN 1440V. Armut / Poverty.

Eros, according to a legend told by Diotima in Plato’s Symposium, is the son of Poverty – Penia – and Resoure – Poros –. Poverty is the other side of the development of (economic, linguistic) wealth and riches. Our seminar will unfold certain aspects of (the love for) this other side. Readings include texts by Bonaventura (Apologia pauperum/Defense of the Mendicants), Hans Sachs (Die tugentreich fraw Armut), Heinrich Heine (Die schlesischen Weber), Franz Grillparzer (Der arme Spielmann); fairy tales by the Grimm brothers; Karl Marx; Bertolt Brecht (Vom armen B.B.), Walter Benjamin (Erfahrung und Armut), and Martin Heidegger (Die Armut).

GrMN 1440W. The European Novel from Goethe to Proust (COLT 1420).

Interested students must register for COLT 1420.

GrMN 1440X. “Stranger Things: The German Novella”.

Goethe’s famous description of the novella as an “unheard-of event” holds difficult to define, the novella as a form mirrors the paradoxes of its narrative. In this course, we will ask how form and content come together in the novella to engender strange occurrences that vacillate between everyday experiences and fever dreams. What is it about the German novella that creates such a particular sense of unease, and how does this genre mediate modern experience? [In English. All students welcome.]

WRIT

GrMN 17166. WRIT 12:00-12:50 (12) N. Lozinski-Veach
GRMN 1660Q. Film and the Third Reich.
This course explores the cinema of the Third Reich as well as filmic responses to World War II and the Holocaust. Sections will be dedicated to propaganda films by Leni Riefenstahl and others; to the relationship between Third Reich cinema and Hollywood; to propaganda films produced by the Allied forces, and to movies about the Holocaust such as Shoah and Schindler’s List. We will discuss key concepts of film theory, cinema’s political efficacy, Holocaust representation in film, music, and language, and questions of trauma, commemoration, and victimhood. [Taught in English; students from diverse fields welcome.]

Fall GRMN1660Q S01 17193 TTh 9:00-10:20(08) (D. Johannsen)

GRMN 1800. Posthumanism and the Ends of Man (COLT 1814Y).
Interested students must register for COLT 1814Y.

Fall GRMN1800 S01 17207 Arranged "To Be Arranged"

GRMN 1892. Kafka and the Philosophers.
Kafka's writings take as a central concern the philosophical interpretability of what we call literature. What is one to make, for instance, of a text that begins with a protagonist awakening one morning to realize that he has been transformed into a monstrous vermin? Or another awakening protagonist unexpectedly detained by officers waiting in his apartment? For Kafka, “correct understanding of something and misunderstanding of the same thing are not entirely mutually exclusive.” We will study some of Kafka’s greatest texts alongside key attempts at interpreting Kafka philosophically, including Benjamin, Adorno, Derrida, Deleuze/Guattari, and Agamben. In English; diverse fields welcome.

Spr GRMN1892 S01 25890 M 3:00-5:30(13) (G. Richter)

GRMN 1900K. Bleibende Irritationen: Heinrich Heine und Deutschland.
Heinrich Heine (1797-1856) has filled many roles in the history of German culture: a poet who wrote some of the most “Romantic” poems in the German language; an author who effortlessly switched between journalistic and literary writing; and a “wound” (Theodor W. Adorno) that cannot stop refusing to heal. We will conduct extensive readings from Heine’s poetic, essayistic, and narrative oeuvre which will result not only in a better understanding of the development of post-classical German literature, but also in a deeper knowledge of German culture as a whole.

Spr GRMN1900K S01 25801 MWF 2:00-2:50(07) (T. Kiesche)

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.

Fall GRMN1981A S01 17331 Arranged "To Be Arranged"

GRMN 1980. 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.

Fall GRMN1980 S01 17331 Arranged "To Be Arranged"

GRMN 2340D. Nietzsche’s Philology.
In September 1869, Friedrich Nietzsche delivers his inaugural lecture as a professor of philology at the University of Basel: Homer und die klassische Philologie. Our seminar will reconsider the Homeric question as it unfolds in Giambattista Vico (Scienza nuova), and Friedrich August Wolff (Prolegomena ad Homerum); its transformation in Nietzsche’s inaugural lecture; and the continuous quest for philology in Nietzsche’s later writings.

Spr GRMN2340D S01 25610 W 3:00-5:30(14) (T. Schestag)

GRMN 2450. Exchange Scholar Program.
Fall GRMN2450 S01 14984 Arranged "To Be Arranged"
Spr GRMN2450 S01 24011 Arranged "To Be Arranged"

GRMN 2661F. Textual Border Crossings: Translational Literature.
We will first attempt to discover what happens to a translation, as well as to the translator, when a text asks for asylum in the guest house of another language: “domestication” or “foreignization,” as Lawrence Venuti puts it? Or is it appropriation, acculturation, adoption? Or rather estrangement, alienation, defamiliarization? Next we will investigate different models of derivative, parasitic, and translational writing by authors as diverse as J. Franzen, E. Fried, Ch. Hawkey, E. Jelinek, Y. Tawada, P. Waterhouse, and others. Finally, we will examine translational writing as a means of decolonizing world literature.

Fall GRMN2661F S01 17512 W 3:00-5:30(17) (C. Ivanovic)

GRMN 2661K. Thinking Tradition: Heidegger, Arendt, Adorno.
Our modes of being in the world, along with our languages, institutions, and most fundamental assumptions and practices, are determined by the dead who preceeded us. Through close readings of key texts that address the rich and vexed concept of “tradition”—Arendt’s Between Past and Future, relevant passages from Heidegger’s Being and Time, Adorno’s “On Tradition” and pertinent sections from Negative Dialectics—we will address issues of fundamental significance to critical thought today. To interrogate the concept of tradition, we also will attempt to understand the stakes of Arendt’s and Adorno’s fundamentally divergent interpretations of Benjamin’s philosophy of history.

Fall GRMN2661F S01 17068 M 3:00-5:30(15) (G. Richter)

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.

Swedish

SWED 0100A. Beginning Swedish.
Swedish 0100 is an introduction to both Swedish and Swedish, covering various aspects of Swedish history, art and society, as well as screening at least three Swedish films per semester. The course packet contains the text/workbook, Mål 1, with additional materials. We will cover one chapter of Mål per week, with quizzes every three weeks. There will be a midterm and a final exam, along with a short take-home project.

This is a small class, so your presence is absolutely required. Emphasis will be placed on speaking and understanding Swedish. Good will and good humor are required.

This is the first half of a year-long course (SWED 0100A and SWED 0200A) whose first semester grade is temporary. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in SWED 0200A covers the entire year and is recorded as the final grade for both semesters.

Fall SWED0100 S01 16802 TTh 4:00-5:30(09) (A. Weinstein)
SWED 0200A. Beginning Swedish.
Swedish 200 is a continuation of Swedish 100, with the same goals, materials and methods. It may also be suited to students with some prior background in Swedish.

This is the second half of a year-long course (SWED 0100A and SWED 0200A) whose first semester grade is temporary. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in SWED 0200A covers the entire year and is recorded as the final grade for both semesters.

Pre-enrollment. 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 SWED0200/S01 25519 TTh 4:00-5:30(16) (A. Weinstein)

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.

Spr HISP0100 S01 24388 MW 9:00-9:50(17) (S. Sobral)
Spr HISP0100 S02 24388 MW 10:00-10:50(17) (S. Sobral)
Spr HISP0100 S03 24388 MW 11:00-11:50(17) (S. Sobral)
Spr HISP0100 S04 24388 MW 12:00-12:50(17) (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 in 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, 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(01) (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(17) (S. Sobral)
Spr HISP0200 S02 24388 MW 10:00-10:50(17) (S. Sobral)
Spr HISP0200 S03 24388 MW 11:00-11:50(17) (S. Sobral)
Spr HISP0200 S04 24388 MW 12:00-12:50(17) (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(04) (V. Smith)
Fall HISP0300 S02 15495 MW 10:00-10:50(04) (V. Smith)
Fall HISP0300 S03 15495 MW 11:00-11:50(04) (V. Smith)
Fall HISP0300 S04 15495 MW 12:00-12:50(04) (V. Smith)
Fall HISP0300 S05 15495 TTh 1:00-2:00(04) (V. Smith)
Fall HISP0300 S06 15495 TTh 1:00-2:00(04) (V. Smith)
Spr HISP0300 S01 24395 MW 10:00-10:50(09) (V. Smith)
Spr HISP0300 S02 24395 MW 11:00-11:50(09) (V. Smith)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**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 571 and 650, or AP score of 4 in language. 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.

**HISP 0600. Advanced Spanish II.**
Offers continued, advanced-level work in speaking, listening, reading, and writing, 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: HISP 0500 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; 15 spaces are available for students during pre-registration.

**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 0500. Students who complete HISP 0490A successfully can continue in our program with HISP 0500 as the next level.

**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: HISP 0400 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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 TTh 12:00-1:30(10) (S. Thomas)

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'

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. FYS
Spr HISP0750G S01 24840 TTh 10:30-11:50(09) (M. Vaquero)

HISP 0750Q. Health, Illness and Medicine in Spanish American Literature and Film.
In this class we will read/see, discuss and write about texts and films that deal with health, illness, death and medicine in primarily Spanish American contexts. Our approach will be informed by principals of Narrative Medicine that demonstrate how attending to, representing, and affiliating oneself with other human beings by studying literature and the arts can transform relationships between patients and healthcare professionals. We will be honing our reading and analytic skills as we confront the subjective dimensions of illness and medicine from humanistic and cross-cultural perspectives. IN SPANISH.
Spr HISP0750Q S01 25712 MWF 1:00-1:50(06) (J. Kuhnheim)

HISP 0760. Transatlantic Crossings: Readings in Hispanic Literatures.
This course provides students a comprehensive introduction to literature and culture of the Spanish-speaking world, through exploration of a wide range of genres (short story, poetry, theater, novel, and film) and periods of production. The course not only gives students a contextualized historical panorama of literature in Spanish, it also equips them with strategies for reading, thinking, and writing about texts and films in Spanish, preparing them for more advanced literature and culture courses in Hispanic Studies. The course is conducted entirely in Spanish. WRIT
Spr HISP0760 S01 24410 MWF 11:00-11:50(04) 'To Be Arranged'

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.
Fall HISP1240O S01 15855 TTh 2:30-3:50(03) (L. Bass)

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. WRIT
Spr HISP1290U S01 24412 TTh 2:30-3:50(11) (S. Thomas)

HISP 1330C. Indigenous Literatures of Latin America.
This course explores the presence of indigenous cultures in Latin American literature over the last five centuries. Blending historical and literary analysis, we will delve into foundational indigenous narratives (with a stress on Nahuatl, Mayan and Quechua variants); the vision of Colonial mestizo and bilingual go-betweenes; othering discourses in antiquarian, archeological and travel narratives; and the indigenous imprint in contemporary novels, short stories and poetry, including indigenous, women and transnational authors. Through this journey, marginalized cultures throughout the continent show their resilience as the multicultural plot of Latin American history comes to the fore. In Spanish.
Spr HISP1330C S01 25674 Th 4:00-6:30(17) (J. Ortega)

HISP 1330E. Rediscovering New Worlds: The Conquest of the Americas in Contemporary Literature and Film.
Studies the problematic relation 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.
Spr HISP1330E S01 25066 M 3:00-5:30(13) (L. Montero)
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, Zambrano and others) alongside some of their major influences (e.g. Poe, Conrad, 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.
Spr HISP1330Q S01 24647 MWF 12:00-12:50(05) (M. Clayton)

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.
Fall HISP1330T S01 16670 TTh 10:30-11:50(13) (M. Vaquero)

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 thrived. 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.
Fall HISP1330Z S01 15654 TTh 1:00-2:20(10) (F. Martinez-Pinzon)

HISP 1370N. Carlos Fuentes and the New Mexican Narrative.
This seminar will focus on close-readings and conceptualization of Fuentes’ innovative works of fiction and main ideas on Mexico and its cultural history. We will discuss a selection of his short-stories, novels and essays, moving from the political to the Gothic, from history to the Baroque. We will follow with new Mexican fiction writers who renew and debate Fuentes practices and ideas. Among them, Carmen Boullosa, Jorge Volpi, Pedro Ángel Palou, Cristina Rivera Garza and Yuri Herrera. The seminar will be in Spanish, and is limited to 40 students.
Spr HISP1370N S01 25737 W 3:00-5:30(14) (J. Ortega)

HISP 1370V. Literature and Film of the Cuban Revolution.
Cuba’s revolution of 1959 gained extraordinary visibility internationally, motivating images of bearded rebels, jubilant crowds and middle-class flight. Yet even as the Cuban Revolution became an object of representation abroad, it guided the domestic production of new forms of literature and cinema. Over the course of the semester, we will trace the relationship between fiction and film, and between art and the revolutionary project, from 1959 to the present day.
Spr HISP1370V S01 25684 TTh 9:00-10:20(01) (E. Whittfield)

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 1371B. Sports and Culture in Latin America.
Sports in Latin America are big, and in some cases huge, and their significance goes way beyond pure entertainment. They are a contemporary theater of sorts where underlying social tensions are relieved and sometimes exacerbated. This course studies soccer, boxing, baseball and lesser-known sports (e.g., ultramarathons and women’s wrestling) in relation to Latin American national narratives, politics, race, and gender. Using tools of sociology and anthropology, among others disciplines, we will study the representation of and discourse about sports in cinema, literature, television, and other media. IN ENGLISH.
Fall HISP1371B S01 17474 MWF 12:00-12:50(12) (L. Estrada Orozco)

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. This course is structured as a workshop, with students sharing their work – both translations and reading reflections – and collaborating with their peers. Pre-requisite: HISP 0600 or equivalent. WRIT
Spr HISP1500L S01 25327 F 3:00-5:30(15) (S. Thomas)

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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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, Hilario 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)

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 comedia’s main sub-genres (honor 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.
Spr HISP2160Q S01 24664 F 3:00-5:30(15) (L. Bass)

HISP 2250N. Madrid’s Modern Landscapes (1780-1900).
A seminar to study the changing relationship between landscape, architecture, and society during Madrid’s modernization, from the late eighteenth century to the early twentieth. Considers representations of gardens, parks, and “natural” landscapes around the Spanish capital as expressions of how writers, planners, and intellectuals envisioned changes in ideas of national identity, gender relationships, class consciousness, and artistic perception. Readings, presentations, and group discussions are designed to promote a sustained analysis of such concepts as modernization, nature, the city and the country, with an eye not only to Madrid’s past but also to our own relationship to landscape in the present.
Fall HISP2250N S01 17461 T 4:00-6:30(09) "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HISP 2350E. Novela latinamerica contemporánea: Crítica Textual y Ediciones Críticas.
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 2350M. Poetics of the Avant-Garde in Latin America.
This course traces the shocks and flows of avant-garde activities through Latin America, beginning in the first decades of the twentieth century and weaving our way to the present. We will explore manifestoes, poetry, artworks, and film from Argentina, the Caribbean, Chile, Brazil, Mexico, and Peru, from creacionismo through Brazilian modernismo, ultraísmo and estridentismo, poesía afroantillana and tecnocindigenismo, with occasional detours into Iberian experiments, culminating with studies of the neo-avant-gardes of the 1960s and of the nostalgia for the avant-gardes which characterizes the early twenty-first century.
Fall HISP2350M S01 25817 W 3:00-5:30(14) (M. Clayton)

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 maturity, fatherhood, and childhood; monstrous families and the specter of incest; modern "found" families constructed outside biological bonds. Texts and films by Sender, Buero Vallejo, Delibes, Cela, Laforet, Buñuel, Borau, Almodóvar, Saura, among others.
Fall HISP2620A S01 15853 W 3:00-5:30(17) (S. Thomas)

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 "To Be Arranged"
Spr HISP2970 S01 24017 "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 "To Be Arranged"
Spr HISP2990 S01 24018 "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 0150F. Pirates.
As long as ships have sailed, pirates have preyed upon them. This course examines piracy from ancient times to present, from the Mediterranean Sea to the Indian Ocean and the Caribbean. We will explore questions: How did piracy evolve over time? Where, why, and how did people become pirates, and what (if anything) made them different from other seafarers? How is piracy related to other historical processes, notably imperialism and nation-building? What explains the resurgence of piracy in the twenty-first century? Why have pirates become the stuff of legend, and how accurately are they portrayed in books and films?
Spr HIST0150F S01 25483 MWF 11:00-11:50(04) (R. Cope)

HIST 0150G. History of Law: Great Trials.
Through discussion of a variety of precedent-setting trials throughout history, this course will probe the nature of demonstrative justice, the relationship between ideology and law in different societies, the politics of trials, and the relationship of trials to terror(ism) and social marginalization. Cases to be covered include: Socrates, Jesus Christ, the mythical Japanese Okuninushi, witch trials, the French Revolutionary Terror, the Dreyfus Affair, the Scopes (monkey) trial, the Stalinist show trials, the war crimes trials at Nuremberg, the Chinese Gang of Four, and the trials of Nelson Mandela and Saddam Hussein.
Spr HIST0150G S01 24222 MWF 10:00-10:50(03) (H. Case)

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 16466 Th 2:30-3:50(03) (H. Cook)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 0203. Modern Africa: From Empire to Nation-State.
This course examines the major historical developments in Africa from 1945 to the present and pays special attention to the diversity of experiences within the vast continent. The first part focuses on Africans’ varied responses to the waning European imperial project and explores different ways in which African nationalist leaders and everyday people challenged colonial administrations to ultimately achieve their independence. The second part of the class investigates the consequences and opportunities of decolonization, including questions of political legitimacy, state-building, structural adjustment programs and international aid, human rights, and civil conflicts. DPLL
Spr HIST0203 S01 25702 TTh 1:00-2:20(10) (J. Johnson)

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 0257. Modern American History: New and Different Perspectives.
Rather than a survey, this course uses specific episodes and events to reveal different modes of analysis. Examples of questions are: What do gender perspectives tell us about men on the frontier and women in dance halls? What is the importance of baseball to American culture? How do a historian and a lawyer differ in their analysis of a sensational crime case? How can we understand why the U.S. dropped two atomic bombs on Japan? How did scandals in television and popular music signal an end to American innocence? How has the Baby Boom generation altered American society? And more. WRIT
Spr HIST0257 S01 24238 TTh 9:00-10:20(01) (H. Chudacoff)

HIST 0270A. From Fire Welders 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 0270B. From the Columbian Exchange to Climate Change: Modern Global Environmental History.
Environmental stories are constantly in the news, from weird weather to viral outbreaks to concerns about extinction and fracking. In this course, we put current events in the context of the past 500 years, exploring how climate, plants, animals, and microorganisms -- not just humans -- acted as agents in history. From imperialism to the industrial revolution and from global capitalism to environmental activism, we will examine how nature and culture intermingled to create the modern world. This is an introduction to environmental history and assumes no prior courses.
Spr HIST0270B S01 25370 MWF 12:00-12:50(05) (B. Demuth)

HIST 0276B. Science and Capitalism.
We will explore the longstanding relationship between science and commerce from the 17th century to our own asking when the modern notion of science as a disinterested pursuit of objective truth took root. We will also explore how knowledge of the natural world has been shaped by personal, financial, and other kinds of self-interest in a number of diverse contexts ranging from Galileo’s invention of the telescope in Renaissance Italy to the patenting of genetically engineered organisms in today’s world, paying special attention to the diverse mechanisms that have been devised to guard against fraud and disinformation. WRIT
Spr HIST0276B S01 25365 TTh 1:00-2:20(10) (L. Rieppel)

HIST 0286A. History of Medicine I: Medical Traditions in the Old World Before 1700.
People have always attempted to promote health and prolong life, and to ameliorate bodily suffering. Those living in parts of Eurasia also developed textual traditions that, together with material remains, allow historians to explore their medical practices and explanations, including changes in their traditions, sometimes caused by interactions with other peoples of Europe, Asia, and Africa. We’ll introduce students to major medical traditions of the Old World to 1700, with emphasis on Europe, and explore some reasons for change. A knowledge of languages and the social and natural sciences is welcome not required. P WRIT
Spr HIST0286A S01 24220 MWF 9:00-9:50(02) (H. Cook)

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)

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 per cent, 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. Chudacoff)
Spr HIST0556A S01 24233 Th 4:00-6:30(17) (H. Chudacoff)
HIST 0557C. Narratives of Slavery.
This course will uncover the history of the slave trade, the labor regimes of slavery in the Caribbean and North America, and the rise of the Cotton Kingdom through the voices of the very people who lived through it: enslaved people themselves. We will read slave narratives, court documents, abolitionist treaties, oral histories of formerly enslaved people, and fictional accounts produced in the period. We will give special attention the ways that different kinds of historical sources—different types of narratives—shape what we know and how we know it in the history of slavery. FYS WRIT DPLL
Fall HIST0557C S01 17073 M 3:00-5:30(15) (E. Owens)

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 Spanish America 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 0940B. The Campus on Fire: American Colleges and Universities in the 1960's (EDUC 0400). Interested students must register for EDUC 0400. Spr HIST0940B S01 25952 Arranged "To Be Arranged"

HIST 0940F. Brown v. Board of Education (EDUC 0610). Interested students must register for EDUC 0610. Fall HIST0940F S01 16395 Arranged "To Be Arranged"

HIST 0940K. Israel's Wars (JUDS 0505H). Interested students must register for JUDS 0050H. Fall HIST0940K S01 16824 Arranged "To Be Arranged"

HIST 1030. Southern African Entanglements: Class, Gender, Race, and Species since 1870.
Examines the contradiction of twentieth century South Africa as a divided society that nonetheless had dense contact across boundaries. In considering daily life, social interactions, and relations with animals, we find a challenging politics of entanglement within the class, gender, and racial hierarchies of apartheid. We close with a discussion of new divisions and alignments emerging during the transition to democratic rule in the 1990s.
Spr HIST1030 S01 25700 MWF 1:00-1:50(06) (N. Jacobs)

HIST 1101. Chinese Political Thought from Confucius to Xi Jinping.
Xi Jinping, President of the People's Republic of China, cites the ancient political thinker Han Feizi (280-233 BCE) as an important influence on his approach to governance. He has also embraced (as have several leaders before him) some of the political and social ideals of Confucianism—ideals first stated in the sixth century BCE. This lecture-and-discussion course traces the history of Chinese political thinking from the first Chinese state to the present, emphasizing first, those ideas that continue to shape Chinese notions of governance, and second, comparisons between these and American political ideals. P WRIT Spr HIST1101 S01 25152 TTh 10:30-11:50(09) (C. Brokaw)

When Japan ratified the United Nations' International Covenant on Civil and Political Rights, its representative reported, “The right of any person to enjoy his own culture…practice his religion or to use his own language is ensured under Japanese law. Minorities … do not exist in Japan.” NOT! Many minority communities are present in Japan today. This course examines how several came into existence in the modern era, struggling to maintain distinctive lifestyles in a society that often defines itself as one of the world’s most homogenous, and influenced the flow of Japanese history. Fall HIST1145 S01 16989 TTh 9:00-10:20(08) (J. McClain)

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)

Uses film, oral histories, historical fiction, and more traditional forms of historical interpretation to explore the events, ideas, and legacies of Japan's Pacific War. The armed conflict began in 1937 with the Japanese invasion of China and ended in 1945 with the atomic bombing of Hiroshima and Nagasaki. Some attention is paid to military developments, but the principle concerns fall into the areas of mutual images, mobilization, and memory. WRIT Spr HIST1155 S01 24226 MWF 11:00-11:50(04) (K. Smith)

HIST 1200B. The Fall of Empires and Rise of Kings: Greek History to 478 to 323 BCE.
The Greek world was transformed in less than 200 years. The rise and fall of Empires (Athens and Persia) and metamorphosis of Macedon into a supreme power under Philip II and Alexander the Great provide the headlines. The course covers an iconic period of history, and explores life-changing events that affected the people of the eastern Mediterranean and the topics that allow us to understand aspects of life and culture of the peoples of the eastern Mediterranean. Through these transformations, offers insights into the common pressures that communities confronted. No prior knowledge of ancient history is required. P Spr HIST1200B S01 25371 MWF 2:00-2:50(07) (G. Oliver)

HIST 1200C. History of Greece: From Alexander the Great to the Roman Conquest.
In 334 BCE, the 22-year-old Alexander crossed over to Asia and North Africa perhaps already in his own mind to conquer the known world, thus changing the history of the West forever. The values of a small, if intensely introspective, people (the Greeks) became the cultural veneer for much of the West, as the period became known as the Hellenistic ("Greekish") Age. It led to the spread of a monotheistic idea, a profound belief in individualism, alienation from central power, and yet, conversely, the creation of natural law and human rights, along with a deep desire for universalism. P WRIT Fall HIST1200C S01 15278 TTh 1:00-2:20(10) (K. Sacks)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 1210A. The Viking Age.  
For two centuries, Viking marauders struck terror into hearts of European Christians. Feared as raiders, Norsemen were also traders and explorers who maintained a network of connections stretching from North America to Baghdad and who developed a complex civilization that was deeply concerned with power and its abuses, the role of law in society, and the corrosive power of violence. This class examines the tensions and transformations within Norse society between AD 750 and 1100 and how people living in the Viking world sought to devise solutions to the challenges that confronted them as their world expanded and changed. P WRIT  
Fall HIST1210A S01 24224 MWF 11:00-11:50(04) (J. Conant)  

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 seiche. 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 1230C. The Search for Renewal in 20th century Europe.  
The overarching theme of the course is the relationship between modernity and the primitive as manifested in major cultural, aesthetic and political movements in the 20th century. Films are an integral part of the course. WRIT  
Spr HIST1230C S01 24227 MWF 12:00-12:50(05) (M. Gluck)  

HIST 1235A. Making A "Second Sex": Women and Gender in Modern European History.  
This course deals with the history of European women and gender from the Enlightenment to the present. It will focus on large historical themes and questions, especially shifting constructions of femininity and masculinity. It will begin with an analysis of eighteenth-century philosophies regarding women and gender, and it will move to examinations of specific topics such as industrialization, Victorian femininity, the suffrage movements, gender and the Great War, interwar sexuality, fascism, gender and the Second World War, and the sexual revolution.  
Fall HIST1235A S01 17017 MWF 12:00-12:50(12) (K. Colvin)  

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 disillusionment 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, 1520-1660.  
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 1266D. British History, 1660-1800.  
A survey of British history from the restoration of monarchy to the Wilkes affair and the loss of the American colonies. In addition to political developments such as the Glorious Revolution and the rise of party, examines political ideology (including the great political theorist, John Locke) and various themes in social history (such as crime, popular protest, the sexual revolution, and the experiences of women). P WRIT  
Spr HIST1266D S01 24230 MWF 2:00-2:50(07) (T. Harris)  

This course follows the history of France from the time of Louis XIV to the present, focusing on social and cultural trends, with particular emphasis on the boundaries of French national identity. It asks who belonged to the French nation at key moments in French history, including the Enlightenment, the French Revolution, the Napoleonic era, industrialization, imperialism, and the two world wars, as well as the complex questions presently facing France. We will examine how inclusions and exclusions during these moments reveal larger themes within French history, such as those dealing with race, class, gender, immigration, and anti-Semitism, amongst others.  
Spr HIST1272C S01 25668 MWF 12:00-12:50(05) (K. Colvin)  

HIST 1280. Death from Medieval Relics to Forensic Science.  
From CSI: Crime Scene Investigation to Ghost Busters to murder mysteries, western society finds death and dead bodies both fascinating and horrifying. This lecture course considers how the western world has dealt with life’s most fundamental truth – all humans die – by looking at the history of death and dead bodies from the Middle Ages up to the early twentieth century. Topics include the worship of Christian relics, Catholic and Protestant conceptions of the "good death," body snatching and dissection, society’s fascination with murder, execution as legalized death, forensic science and dead bodies, and ghosts.  
Spr HIST1280 S01 25667 MWF 10:00-10:50(03) (W. Henry)  

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.  
To study the Mexican Revolution is to examine the sweeping history of Modern Mexico: from the Liberal reforms of Benito Juárez to the enduring power of the Partido Revolucionario Institucional (PRI); from peasant revolutionary Emiliano Zapata to his namesake Zapatistas of Chiapas; from Pancho Villa’s mass revolutionary army to transnational mystic Teresita Urrea; from the landlord Francisco Madero who led the insurgency to Lázaro Cárdenas who enacted land and labor reforms; from the constant flows of migrants crossing the border back and forth to Mexico’s defiance against Trump’s wall.  
Fall HIST1333 S01 15279 TTh 1:00-2:20(10) (E. Hu-Dehart)
HIST 1370. The United States and Brazil: Tangled Relations.
This lecture course explores the complex relations between Brazil and the United States from the American Revolution to the present. Through the use of documents, films, literature, and historical monographs, we will examine the diplomatic, political, economic, and cultural interactions between the largest nations in the Americas, paying particular attention to the growing influence of the United States. We will focus on the “Special Relationship” that developed during World War II, the effects of Washington’s foreign policy during the Cold War, U.S. involvement over the course of the military dictatorship, and new forms of interactions after the return to democracy.
Spr HIST1370 S01 25160 TTh 9:00-10:20(01) (J. Green)

HIST 1440. The Ottomans: Faith, Law, Empire.
This course explores the rise and fall of the longest-lived Muslim dynasty in history, the Ottoman Empire (1299-1923). From Turkish nomads in Asia Minor to multiethnic empire spanning three continents, the Ottomans were the premier power of southern Europe, northern Africa, and the eastern Mediterranean in the early modern world. From medieval “Turko-Persia” to the catastrophes of World War I, we shall engage difficult historical questions surrounding law and empire, religion and secularism, nationalism and statebuilding, and the legacy of Ottoman rule in and outside today’s Turkey—from Sarajevo to Baghdad, Crimea to Mecca, and “where East meets West”. Constantino/ple/Istanbul.
Spr HIST1440 S01 25622 TTh 2:30-3:50(11) (F. Ahmed)

HIST 1460. Modern Turkey: Empire, Nation, Republic.
This course will treat some of the major themes of Turkish history and society, one of world’s Muslim majority countries today. Since Turkey unfolded from the Ottoman Empire in the early 20th century, Turkish nationalism and its many shapes and forms has been at the center of the country’s uneasy history of democratization. Mapping the political, socio-economic and cultural landscape, this course explores Turkish history to study state and society through political thought and economy of democracy, exploring secularism, Islam, feminism, Kurdish question, memory and popular culture.
Spr HIST1460 S01 25673 T 4:00-6:30(09) (M. Toksoz)

HIST 1501. The American Revolution.
This course will explore the period of the American Revolution from the 1760s through the turn of the nineteenth century. Taking a broad view of the conflict and its consequences, we will situate the American colonies in their North American and Atlantic context, examine the material and ideological concerns that prompted the Revolutionary War, and trace the consequences of the conflict for the nation that followed. Students will be invited to look beyond the Founders to the experiences of women, slaves, Native Americans, common soldiers, and Loyalists.
Spr HIST1501 S01 24242 TTh 10:30-11:50(09) (S. Rockman)

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.
Fall HIST1505 S01 15266 MWF 1:00-1:50(06) (L. Riepep)

HIST 1515. American Slavery.
This lecture course will address the history of slavery in America. We will trace the emergence of slavery in the New World, with a heavy emphasis on slavery in the U.S. South, and a focus on the relationship of slavery to the emergence of systems of racial and gendered power. The course is broad in scope, beginning with the emergence of the slave trade and concluding with a look forward to the ways that the history of slavery continues to impact the way race and gender (as well as sexuality and class) structure our lives today.
Spr HIST1515 S01 24223 MWF 10:00-10:50(03) (E. Owens)

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.
In this class, we will consider some of the forms of empire-building by various groups of indigenous and colonizing peoples in what is now the United States in order to understand the development of imperial U.S. power in both domestic and international contexts. Rather than resting upon a foregone conclusion of European settler colonial “success,” the course explores the contested and inadequate nature of empire-building even within unbalanced power relationships.
Fall HIST1553 S02 17373 MWF 11:00-11:50(16) (S. Haley)

HIST 1570. American Legal and Constitutional History.
History of American law and constitutions from European settlement to the end of the 20th century. Not a comprehensive survey but a study of specific issues or episodes connecting law and history, including witchcraft trials, slavery, contests over Native American lands, delineations of race and gender, regulation of morals and the economy, and the construction of privacy.
Spr HIST1570 S01 25093 MWF 1:00-1:50(06) (M. Vorenberg)

HIST 1820B. Environmental History of East Asia.
This is a lecture course on the environmental history of East Asia from prehistory to the present aimed at students with no background in either Asian or environmental history. Because little has been written about Korean or Vietnamese environmental history, it will mostly concern China and Japan, for which there are good textbooks. The course will also incorporate weekly primary source readings, or analysis of artifacts.
Spr HIST1820B S01 24246 TTh 2:30-3:50(11) (B. Lande)

This course connects natural knowledge to larger developments in Renaissance Europe such as nobility court culture, artistic innovation, commercial exchange, exploration and colonization. Topics include: alchemy, early museums, the visual culture of science, and the impact of New World nature on Old World knowledge systems. P WRIT
Spr HIST1825F S01 25163 MWF 1:00-1:50(06) (T. Nummedal)

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.
Fall 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 1931E. The Culture of Death in Ancient Rome (CLAS 1420).
Interested students must register for CLAS 1420.
Spr HIST1931E S01 25913 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
HIST1961I 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)

HIST 1964A. Age of Impostors: Fraud, Identification, and the Self in Early Modern Europe.
Alchemists claiming to possess the philosophers’ stone; basilisks for sale in the market; Jews pretending to be Catholics; women dressing as men: early modern Europe appeared to be an age of impostors. Officials responded to this perceived threat by hiring experts and creating courts, licenses, passports, and other methods of surveillance in an era before reliable documentation, photography, DNA. And yet one person’s fraud was another’s self-fashioning. We will examine instances of dissimulation, self-fashioning, and purported fraud, efforts to identify and stem deception, and debates about what was at stake when people and things were not what they seemed. P WRIT
Fall
HIST1964A S01 15287 W 3:00-5:30(17) (T. Nummedal)

Selected topics in the social history of early modern England (c.1500-1800), with particular emphasis on the experiences of women. Themes to be addressed will include the family, working life, education, crime, politics, religion, and the early feminists. Not open to freshmen sophomores. P WRIT
Spr
HIST1964D S01 24235 M 3:00-5:30(13) (T. Harris)

HIST 1964F. Early Modern Ireland.
This seminar will cover various themes in the political, religious, social and cultural history of Ireland between c. 1500 and the later eighteenth century. Topics to be discussed will include the Reformation, the Irish Rebellion, Cromwell's rule, the War of the Two Kings, popular protest, the beginnings of the Irish nationalism, and the experiences of women. P WRIT
Fall
HIST1964F S01 15281 M 3:00-5:30(15) (T. Harris)

HIST 1964K. Descartes’ World.
An exploration of history and historical fiction through examination of the early life of René Descartes, one of the most famous “French” philosophers of the 17th century. Little is known about his personal life, however, especially before he left France for good in 1628, despite many hints about his years as a soldier, his extensive travels in Europe, and his possible political and occult associations. This seminar is designed as a collective exploration into the small pieces of evidence about his early life and the lives of his friends and enemies in order to understand it imaginatively but truthfully. P
Spr
HIST1964K S01 25703 M 3:00-5:30(13) (H. Cook)

This course will concentrate on European thinkers' engagement with the politics of the 20th century. Discussion will cover a range of cultural and intellectual currents and ideologies—modernism, fascism, communism, “dissidence,” “internal” migration, “anti-politics”—as well as genres (essays, letters, fiction, criticism, poetry, film). WRIT
Spr
HIST1965E S01 25669 M 3:00-5:30(13) (H. Case)

Women have faced a deep antipathy at nearly every turn in their struggles for civic and social inclusion. These denials of women’s rights often take the form of commentaries—sometimes vicious ones—about women’s general natures, bodies, and fitness for public life. Women are consistently tagged with various labels of otherness: opponents of women’s rights deem them irrational, unnatural, traitors to society, even sexual deviants. This course will examine the dangers that women allegedly represent to social stability from the Enlightenment to today, as well as how women have fought back to assert their rights and independence.
Spr
HIST1965N S01 25669 M 3:00-5:30(13) (K. Colvin)

HIST 1965O. ‘Naturally Chic’: Fashion, Gender, and National Identity in French History.
From its beginnings, the fashion industry in France has been synonymous with the international reputation of the nation. Similarly, being “chic,” having an innate sense of discernment and style, became synonymous with French femininity. This seminar will explore the interconnectedness of the history of fashion in France, the requirements it placed on French women, and the pressures the fashion industry has borne since the 1700s. We will look at how fashion reflected and created the moods of various periods, and we will also see how French women’s national belonging has been innately tied to ability to display French fashion. WRIT
Fall
HIST1965O S01 17016 M 3:00-5:30(15) (K. Colvin)

HIST 1966E. Colonial Encounters and the Creation of Latin America.
This seminar examines how interactions between Europeans and indigenous peoples shaped the formation of early Latin America. From Florida to Brazil, invasion led to widely varied outcomes, including outright failures. Students will come to see colonization as a difficult, uneven process, as Europeans struggled to comprehend and engage unfamiliar natural and human environments; the new societies that emerged reflected complex transatlantic exchanges. Our readings will consist of primary sources from the sixteenth century, supplemented by academic texts. Students will write a series of three-page response papers, along with a ten to twelve-page essay on major themes from the course. P
Fall
HIST1966Q S01 15329 Th 4:00-6:30(04) (R. Cope)

HIST 1967E. In the Shadow of Revolution: Mexico Since 1940.
This course traces political, social, and economic developments in Mexico since the consolidation of the revolutionary regime in the 1930s. The topics addressed include: the post World War II economic “miracle”; the rise of new social movements; the Tlatelolco massacre; the deepening crisis of the PRI (the governing party) in the 1980s and 1990s; the Zapatista rebellion; violence and migration on the northern border; and the war against narco-traffickers. WRIT
Spr
HIST1967E S01 25159 W 3:00-5:30(17) (R. Cope)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 1967T. History of the Andes from the Incas to Evo Morales.
Before the Spanish invaded in the 1530s, western South America was the scene of the largest state the New World had ever known, Tawantinsuyu, the Inca empire. During almost 300 years of colonial rule, the Andean provinces were shared by the "Republic of Spaniards" and the "Republic of Indians" - two separate societies, one dominating and exploiting the other. Today the region remains in many ways colonial, as Quechua- and Aymara-speaking villagers face a Spanish-speaking state, as well as an ever-more-integrated world market, the pressures of neoliberal reform from international banks, and the melting of the Andean glaciers. WRIT

Spr HIST1967T S01 24247 T Th 2:30-3:50(11) (J. Mumford)

HIST 1968A. Approaches to the Middle East.
This seminar introduces students to the interdisciplinary field of Middle East Studies in the broader context of the history of area studies in the humanities and social sciences. Why and when did the Middle East become an area of study? What are the approaches and topics that have shaped the development of this field? And what are the political implications of contending visions for its future? The readings sample canonical and alternative works and the classes feature visits by leading scholars who research and write on this pivotal and amorphous region. WRIT

Fall HIST1968A S01 16102 W 3:00-5:30(17) (B. Doumani)

This course is an analysis of where the Mediterranean region fits in the evolving capitalist world-economy in the aftermath of the so-called Age of Discovery. The context of the Mediterranean is set in our own age's "globalization" as histories of capitalism push on the "world" in new ways challenging our mental maps for historical change. The seminar takes on a critical approach to the European historiography on the rise of capitalism and the view that the Mediterranean collapsed with the rise of the Baltic and the Atlantic.

Fall HIST1968F S01 17081 F 3:00-5:30(11) (M. Toksoz)

1000 years ago, Constantinople was the splendor of Eastern Christendom. 500 years later it was the capital of history's greatest Muslim empire. Today, it is Europe's largest city and financial hub of a secular republic. Eschewing generic treatments of a monolithic, timeless "Islam" this course explores questions of Muslim faith and politics, empires and nationalism, as well as race, gender, and belonging in an undeniably pivotal country of Europe and Asia: Turkey. From the life and times of the world's best-known sufi saint, to NATO's second-largest military, this course historicizes the medieval beginnings and modern transformations within Turkish Islam.

Fall HIST1968K S01 15560 M 3:00-5:30(15) (F. Ahmed)

HIST 1969A. Israel-Palestine: Lands and Peoples I.
This advanced undergraduate seminar seeks to provide a deeper understanding of the links between the region now known as Israel and Palestine and the peoples that have inhabited it or have made it into part of their mental, mythical and religious landscape throughout history. The course will be interdisciplinary at its very core, engaging the perspectives of historians, geologists, geographers, sociologists, scholars of religion and the arts, politics and media. At the very heart of the seminar is the question: What makes for the bond between groups and place - real or imagined, tangible or ephemeral. No prerequisites required. WRIT

Fall HIST1969A S01 15284 W 3:00-5:30(17) (O. Bartov)

HIST 1969B. Israel-Palestine: Lands and Peoples II.
This advanced undergraduate seminar seeks to provide a deeper understanding of the links between the region now known as Israel and Palestine and the peoples that have inhabited it or have made it into part of their mental, mythical and religious landscape throughout history. The course will be interdisciplinary at its very core, engaging the perspectives of historians, geologists, geographers, sociologists, scholars of religion and the arts, politics and media. At the very heart of the seminar is the question: What makes for the bond between groups and place - real or imagined, tangible or ephemeral. No prerequisites required. WRIT

Spr HIST1969B S01 24248 W 3:00-5:30(14) (O. Bartov)

HIST 1969C. Debates in Middle Eastern History.
This seminar investigates the historical bases of some of the major debates which continue to dominate contemporary discussions on the Middle East. These include debates on colonialism and its legacies; problems associated with the post-colonial Middle Eastern state (the "democracy deficit": human rights; oil; political Islam); and arguments about the causes and consequences of some of the major events in Middle Eastern history (the Israel-Palestinian conflict; the Iranian revolution; the Lebanese civil war; 9/11 and the Iraq invasion; and the Arab Spring). DPLL WRIT

Spr HIST1969C S01 25162 W 3:00-5:30(14) (S. Mitter)

HIST 1969D. Palestine versus the Palestinians.
Strange as it may sound, there is a tremendous tension between the concepts “Palestine” (territory) and the “Palestinians” (identity). Historically, one exists only at the expense of the other. Similarly, Palestinians and Israelis claim to be separate entities, but they are best understood in relation to each other. To explore these paradoxes, students are introduced to alternative frameworks for understanding the colonial ideologies and practices that transformed Palestine into Israel and that still govern the relationship between Palestinians and Israelis. Students will have an opportunity to attend planned workshops on Palestinian-Israeli studies and Mellon Sawyer Seminar on Displacement.

Spring HIST1969D S01 25597 Th 4:00-6:30(17) (B. Doumani)

This seminar examines the major themes and events in the history of the Middle East in the 20th century through a close reading of literary texts and, in some cases, films. Throughout the course we will try to locate the perspectives of the “ordinary people” of the region, and will pay special attention to the voices of those who are rarely heard from in discourses on the Middle East: religious minorities, sexual minorities, women, children, but also criminals, misfits, misanthropes and others who have been deemed social outcasts. DPLL WRIT

Spr HIST1969F S01 25161 M 3:00-5:30(13) (S. Mitter)

HIST 1970D. Problem of Class in Early America.
This seminar considers economic inequality in colonial British North America and the new United States. Studying everyone from sailors, servants, and slaves in the seventeenth century to industrial capitalists and slaveholders in the nineteenth century, this course will look at the changing material structures of economic inequality and the shifting arguments that legitimated or challenged that inequality. Readings will explore how historians have approached the subject of inequality using on class as a mode of analysis. Students will write extended papers that place primary research in conversation with relevant historiography.

Enrollment limited to: 20. Written permission required. WRIT

Spr HIST1970D S01 24251 W 3:00-5:30(14) (S. Rockman)

HIST 1972F. Consent: Race, Sex, and the Law.
In the context of recent student organizing on college campuses, the word “consent” has become headline news. But what is “consent” and what does it have to do with the history of race and sexuality in America? In this course, we will use history, law, and feminist theory to understand the origins of consent, to trace its operation as a political category, and to uncover the many cultural meanings of “yes” and “no” across time. Themes addressed include: slavery, marriage, sex work, feminism, and violence, from the founding of American democracy to the present.

Spr HIST1972F S01 24234 M 3:00-5:30(13) (E. Owens)

Examines how the U.S. has shaped or been shaped by global human rights struggles. Topics include: indigenous rights in the U.S. Early Republic; Antislavery in the early Atlantic World; anti-imperialism in U.S. wars with Mexico and Spain; U.S. and human rights conventions; the Cold War and Civil Rights; and recent U.S. policies concerning human migration. No prerequisites. Priority given to seniors and juniors and those who have not taken the related course HIST 1972A (though students may take both courses). Instructor permission required (email professor before end of registration period).

Fall HIST1972H S01 16833 M 3:00-5:30(15) (M. Vorenberg)
HIST 1974A. 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 polities, 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. P WRIT DPLL
Spr HIST1974A S01 24249 W 3:00-5:30(14) (C. Brokaw)

HIST 1976N. Topics in the History of Economic Thought.
This is a reading intensive seminar that exposes students to the history of economic thought by working through a number of texts about the workings of capitalism. We will make our way through a different set of authors that touch upon a variety of topics, including theories of value, property, markets, labor, inequality, and prices. We will also ask how ideas about the relationship between capitalism and other forms of production have changed over time. In the Spring of 2018, we will devote the entire seminar to Marx, especially the English translation of his seminal work, Das Kapital. WRIT
Spr HIST1976N S01 24255 Th 4:00-6:30(17) (L. Riepepp)

This course is for students interested in how ideas about what the future of human societies would look like have developed over time, and in the impact of those ideas on cultural, social and political norms. We will look carefully at examples of early modern prophecy before turning to the more recent emergence of theories of economic and social progress, plans for utopian communities, and markedly less optimistic and often dark visions of where we’re headed. We will also explore the roles capitalism, popular culture, and science have played in shaping the practices and vocabularies associated with imagining the future. WRIT
Spr HIST1976R S01 24252 W 3:00-5:30(14) (K. Smith)

This course will provide grounding in the emerging field of critical animal studies by surveying how we know and interact with one diverse and charismatic class of animals: the Aves. Inspiring science, art, and conservation, traded as resources, kept as hunters or pets, and eaten as meat, birds provide an excellent avenue into animal studies. We will explore birds channeled through ethnography, ornithology, behavioral sciences, musicology, visual arts, and the history of science. In addition to reading and discussion, we also will experience the many forms of birds around us through indoor and outdoor “laboratory” sessions.
Spr HIST1977B S01 25648 Th 4:00-6:30(17) (N. Jacobs)

HIST 1979C. Putin, Stalin and “Friends”: Understanding Eurasia Today through its History and Personalities.
This course uses the past to understand the present in Russia and its neighboring states. Each week we will use a “friend” (a person drawn from current events) as a window into events past and present. We will read a few contemporary articles about these notables alongside historical works that give us the necessary background to explore key aspects of their story. In the middle of the semester, you will choose an event or theme and execute an independent research project using contemporary and historical sources. Topics explored include gender, political activism, terrorism, immigration and battles to control the past.
Spr HIST1979C S01 25830 Th 4:00-6:30(17) "To Be Arranged"

What does art, architecture and material culture reveal about South Asia’s history? This course explores the significance of images, objects, architecture and other forms of material and visual culture to South Asian societies as well as their transformation during the 19th and 20th centuries under pressure from British colonial rule. We will consider how shifts in the meanings of architectural sites (like temples), images and material objects under colonial rule animated political and religious conflict in South Asia between 1880 and 1947. Topics include nationalist cartography; Hindu-Muslim violence around temples and mosques; public performance and anti-colonial activism. WRIT
Spr HIST1979D S01 25709 T 4:00-6:30(16) (K. Pant)

HIST 1979E. Wise Latinas: Women, Gender, and Biography in Latinx History.
Last summer the Brown community reflected on Supreme Court Justice Sonia Sotomayor’s autobiography that documents how her experience as a Bronx-raised Puerto Rican and “wise Latina” shaped her illustrious legal career. This course will provide historical context for reading Latinx biographies and locate them within a broader history of women, gender, and sexuality in Latinx histories of the United States. We will examine life histories, oral histories, and biographies. Units will explore the histories of Mexican Americans, Puerto Ricans, Cubans, Dominicans, and Central Americans, paying close attention to race and gender and highlighting struggles for social justice.
Spr HIST1979E S01 25837 T 4:00-6:30(16) (E. Amador)

HIST 1979H. Prostitutes, Mothers, + Midwives: Women in Pre-modern Europe and North America.
Today’s society often contrasts stay-at-home moms with working women. How did women in Europe and North America navigate the domestic and public sphere from the late medieval period to the start of the twentieth century? How did gender affect occupational identity? Were women excluded from the professional class? This seminar investigates gender in the workplace, looks at gender-specific employment, and considers how families functioned. Readings include passages from classical, religious, and medical texts as an introduction to medieval gender roles. Students will explore texts, images, and film to understand pre-modern work and the women who did it.
Fall HIST1979H S01 17015 M 3:00-5:30(15) (W. Henry)

HIST 1979K. The Indian Ocean World.
Oceans cover two-thirds of the surface of the earth. They are the world’s great connectors. Rather than political boundaries of empire and nation-state, this course focuses on an enduring geography of water as the central shaper of history. Drawing together the history of three continents this course explores the Indian Ocean world as a major arena of political, economic and cultural contact during the nineteenth and twentieth centuries. As we map the contours of this history we study how race, gender and sexuality were shaped across the Indian Ocean. Major topics include Islam, imperialism, indentured labor migration, liberalism and anti-colonialism. HISTGlobal
Fall HIST1979K S01 16070 W 3:00-5:30(17) (K. Pant)

HIST 1980R. Urban Schools in Historical Perspective (EDUC 1720).
Interested students must register for EDUC 1720.
Spr HIST1980R S01 25954 Arranged "To Be Arranged"

Interested students must register for JUDS 1726.
Spr HIST1981D S01 25527 Arranged "To Be Arranged"

Interested students must register for ENVS 1910.
Spr HIST1981F S01 25530 Arranged "To Be Arranged"

HIST 1981G. Intellectual Change: From Ottoman Modernization to the Turkish Republic (MES 1300).
Interested students must register for MES 1300.
Fall HIST1981G S01 17034 Arranged "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Interested students must register for JUDS 1753.

**HIST 1990. Undergraduate Reading Courses.**
Guided reading on selected topics. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

**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) (N. Shibusawa)
Spr HIST1992 S01 25634 M 3:00-5:30(13) (N. Shibusawa)

HIST 1992 and HIST 1993 students meet together as the History Honors Workshop, offered in two separate sections per week. All students admitted to the History Honors Program must enroll in HIST 1993 for two semesters of thesis research and writing. They may enroll in the course during semesters 6 and 7, or 7 and 8. Course work entails researching, organizing, writing a history honors thesis. Presentation of work and critique of peers’ work required. Limited to seniors and juniors who have been admitted to History Honors Program. HIST 1993 is a mandatory S/NC course. See History Concentration Honors Requirements.
Fall HIST1993 S01 17087 Arranged (N. Shibusawa)
Spr HIST1993 S01 25635 Arranged (N. Shibusawa)

**HIST 1994. History Honors Workshop for Thesis Writers, Part II.**
This is the second half of a year-long course, upon completion the grade will revert to HIST 1993. Prerequisite: HIST 1993. WRIT
Fall HIST1994 S01 17088 Arranged (N. Shibusawa)
Spr HIST1994 S01 25636 Arranged (N. Shibusawa)

**HIST 2450. Exchange Scholar Program.**
Fall HIST2450 S01 14993 Arranged "To Be Arranged"
Fall HIST2450 S02 14994 Arranged "To Be Arranged"
Spr HIST2450 S01 24019 Arranged "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 14995 Arranged "To Be Arranged"
Spr HIST2890 S01 24020 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 history. 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(08) (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 2950. Professionalization Seminar.**
Required of all second year Ph.D. students.
Fall HIST2950 S01 24752 W 12:30-3:00(07) (R. Self)

**HIST 2960. Prospectus Development Seminar.**
This required course open only to second-year students in the History Ph.D. program focuses on the development of a dissertation prospectus. The seminar will include considering the process of choosing a dissertation topic, selecting a dissertation committee, identifying viable dissertation projects, articulating a project in the form of a prospectus, and developing research grant proposals based on the prospectus.
Spr HIST2960 S01 24759 M 9:00-11:30(02) (M. Vorenberg)

**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 2970H. Special Topics Seminar: American Political History.**
This graduate seminar will explore a range of approaches to the study of America’s political past from the colonial period to the late twentieth century, including scholarship on electoral politics, the state, political culture, grassroots politics and resistance, the politics of gender and family, and American political development. We will analyze how scholars have defined and redefined the field over time and throughout we will interrogate the question, “what is political history?”
Spr HIST2970H S01 24699 W 3:00-5:30(14) (T. Steffes)

**HIST 2971E. Latin American Historiography.**
This course examines the development of historical writings on Latin America produced in the United States from the late nineteenth century until the present. We will focus on themes, such as race, gender, labor, subaltern studies, dependency theory, postcolonial analysis, and post-modernism, to understand the diverse approaches to Latin American history.
Spr HIST2971E S01 24700 W 3:00-5:30(14) (J. Green)

**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 15866 F 1:00-3:30(11) (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 2971W. Readings in Environmental History.
This course will introduce graduate students to major themes and problems in the field of environmental history. Topics will include climate, animals, the Anthropocene, empire, capitalism, comparative history, marine spaces, and the intersection of cultural, social, and gender history with the environment field. Readings will draw from classics and newly published material. Geography and time period are expansive. Discussion will use these works to ground major historiographical questions in environmental history, as well as issues of method, evidence, and narrative style.
Fall HIST2971W S01 15858 M 3:00-5:30(15)  (B. Demuth)

HIST 2980W. First Person History in Times of Crisis: Witnessing, Memory, Fiction.
This seminar examines the relationship between History as a narrative of events and history as individual experience. Postulating that historical events as related by historians were experienced in numerous different ways by their protagonists, the seminar focuses on the complementary and contradictory aspects of this often fraught relationship at times of crisis, especially in war and genocide. While much time will be spent on World War II and the Holocaust, the seminar will engage with other modern wars and genocides across the world. Materials will include eyewitness reports, postwar testimonies and trial records, memoirs and relevant works of fiction. Open to graduate students only. M Spr HIST2980W S01 24739 T 6:00-8:30PM(18)  (O. Bartov)

HIST 2981C. The Frontiers of Empire.
This class will look at interactions along and across imperial frontier zones throughout the world, with an emphasis on the pre-modern and early modern period. Readings will be both theoretical and empirical in nature, and will focus on themes including the conceptualization of space; practices and consequences of warfare, captive-taking, and slavery; identity- and secondary state-formation; economy and society; diplomacy and the negotiation of claims to authority.
Spr HIST2981C S01 25671 M 3:00-5:30(13)  (J. Conant)

HIST 2981J. The Body.
This seminar will consider theories of the body as a site of knowledge, politics, culture, gender, and identity in a broad range of temporal and geographic contexts. We will also examine how historians have written the history of the body, and what sources they have used to do so.
Spr HIST2981J S01 25860 Th 4:00-6:30(17)  (T. Nummedal)

HIST 2981P. Legal and Constitutional History: Methods and Approaches in Comparative Perspective.
This seminar explores what it means to research and write legal history—broadly construed and incorporating constitutional history and sociological history. After select "canonical" readings across geographic and chronological fields, we turn to cutting-edge themes including the laws of war and human rights; religion and secular authority; race, gender, and legality; and comparative/transnational approaches to justice and the rule of law. Open to graduate students pursuing questions of law and society or the history of legal ideas and institutions, this seminar seeks diverse interpretive methods and approaches to legal history, including but not limited to the use of court records.
Spr HIST2981P S01 24906 M 3:00-5:30(13)  (F. Ahmed)

HIST 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 HIST2990 S01 14996 Arranged To Be Arranged
Spr HIST2990 S01 24021 Arranged To Be Arranged

History of Art and Architecture
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(06)  'To Be Arranged'

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(09)  'To Be Arranged'

HIAA 0005. Structural Analysis.
The basic content will be statics and strength of materials. The first portion will deal with force vectors, trusses, cross-sectional properties, and shear/ moment diagrams, followed by stresses, strains, material applications and the analysis procedures necessary to compute structural behaviors. This class is foundational to all future structural design classes such as Wood Structures and Steel Structures. A math test will be given prior to the first class to determine which students are required to attend a supplemental lecture class instructed by the teaching assistant. This course is a prerequisite for Steel Structures, Wood Structures, and Concrete Structures.
Fall HIAA0005 S01 15316 F 9:40-12:40(01)  'To Be Arranged'

Over the long nineteenth century (1789-1900) revolutions replaced kings with citizens. Capitalist and colonial expansion mobilized armies, goods, and slaves across continents. New class and gender dynamics changed patterns of sociability. Technological innovations mass produced images and goods. In this course, we will discern such social and historical factors in Europe and across the globe alongside artistic ones to interrogate what makes art in this period irreplaceably modern. We will study the turbulence that has defined the century, including the art historical swings in style from Classicism to Romanticism to Impressionism, with care. Course includes visits and assignments in museums.
Fall HIAA0077 S01 17530 MWF 11:00-11:50(16)  (H. Shaffer)

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)  (O. 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 Postmodernism.
Spr HIAA0089 S01 24269 MWF 10:00-10:50(03)  (D. Nickel)
HIAA 0560. Popes and Pilgrims in Renaissance Rome.
Examines Renaissance Roman painting, sculpture, and architecture in the context of the unique urban character of the city: site of antique myth, religious pilgrimage, and a cosmopolitan court. Beginning with Filarete and Fra Angelico, we move through the Renaissance (Michelangelo and Raphael), looking at the formation of artists' workshops and academies, ending with the urbanization programs of Sixtus V. WRIT A
Spr HIAA0560 S01 25656 TTh 1:00-2:20(10) (E. Lincoln)

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 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 25453 Th 4:00-6:30(17) (I. Osayimwese)

HIAA 1440B. Architecture of Solitude: The Medieval Monastery.
Religious men and women, as well as their patrons, sought to establish places of devotion and learning across the medieval landscape. This course examines the rise and development of the medieval monastery from its late antique beginnings in the deserts of Africa to the rise of the preaching orders in early thirteenth-century Europe. Emphasis will be placed upon the material expressions of western monasticism and upon the notion of the monastery as an architectural, archaeological and historical research problem through examination of individual case study examples. Instructor permission required. Enrollment limited to 12. A
Spr HIAA1440B S01 25663 F 3:00-5:30(15) (S. Bonde)

HIAA 1440F. 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 Qutb mosque in Delhi and the adaptation of the Bankside Power Station as the Tate Gallery. WRIT
Fall HIAA1440F S01 17243 M 3:00-5:30(15) (S. Bonde)

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 atlases; and in Rome obsessions with Egyptian engineering, the vitality of Arabic 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. After seeing how 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, proverbs, 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 artist. Spr HIAA1600C S01 24266 M 3:00-5:30(13) (J. Muller)

HIAA 1810. Contemporary Art and Activism.
This seminar will trace the ways that art has been conceived as a form of political activism since 1989. We will analyze strategies such as social practice, relational aesthetics, new genre public art, tactical media, critical geography, useful art, and the interactions among artists and Occupy. Emphasis will be on these recurrent issues: the relationship between aesthetics and politics, conceptions of community and the public, and the practical aims of art, both intended and actual. Close readings, class discussion, and weekly response papers will culminate in a final research paper interrogating the political implications of a single artist or artwork. WRIT
Fall HIAA1810 S01 17520 T 4:00-6:30(09) (L. Caplan)

HIAA 1910E. Project Seminar for Architectural Studies Concentrators.
Spr HIAA1910E S01 24270 M 3:00-5:30(13) (D. Neumann)
HIAA 1930. The History and Methods of Art Historical Interpretation. This seminar provides an overview of the methods and theories used by art historians and introduction to the history of the discipline. Through readings and discussions, we will examine how art history emerged as an intellectual pursuit and humanistic discipline in the modern era, and review its foundations in the Western philosophical tradition. The transformations wrought by the advent of critical theory and the incorporation of approaches from outside the discipline of art history will receive particular attention in the second half of the course. Open to juniors and seniors concentrating in History of Art and Architecture or Architectural Studies.

Fall HIAA1930 S01 17218 W 3:00-5:30(17) (D. Nickel)

HIAA 1990. Honors Thesis. 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 2440B. Architectural of Solitude: The Medieval Monastery. Religious men and women, as well as their patrons, sought to establish places of devotion and learning across the medieval landscape. This course examines the rise and development of the medieval monastery from its late antique beginnings in the deserts of Africa to the rise of the preaching orders in early thirteenth-century Europe. Emphasis will be placed upon the material expressions of monasticism and upon the notion of the monastery as an architectural, archaeological and historical research problem through examination of individual case study examples. Instructor permission required. Enrollment limited to 12.

Spr HIAA2440B S01 25662 F 3:00-5:30(15) (S. Bonde)

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 Qutb mosque in Delhi and the adaptation of the Bankside Power Station as the Tate Gallery. Limited to 15.

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 2550C. Color. How do we understand color as an integral part of a visual object? How shall we think about the artist's decision and the viewer's responsibility? This seminar will look at color (and its purposeful repression) in painting, sculpture and the decorative arts of the early modern period, also considering the discourses of color in 20th-century painting and other eras, such as antiquity, when color was a profitable topic through which to discuss the senses. We will also look at the economy and science of pigments, and the value of color in different discourses and objects. Graduate students, or by permission.

Fall HIAA2550C S01 17275 W 3:00-5:30(17) (E. Lincoln)

HIAA 2930B. Telling Her Story: Women Designers in Rhode Island. The 2017 graduate practicum will investigate the history of women designers in Rhode Island. Using the archive of the former Lowthorpe School of Landscape Architecture for Women (merged with RISD in 1945), we will consider the history of women’s education, the design of women’s colleges and schools, women as teachers and practitioners of art and architecture, the politics of collecting women’s design work, and gender as an analytical category in historiography. To disseminate our research to the public, we will design a walking tour for the 2019 annual meeting of the Society of Architectural Historians in Providence.

Fall HIAA2930B S01 17220 F 3:00-5:30(11) (I. Osayimwese)

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 1443. History of American Intervention. This course reviews modern history through the study of invasions, coups, and other interventions carried out by the United States. From the Marine assault on Tripoli in 1805 to the bombing of Tripoli in 2011, there have been scores of these episodes. They have shaped American history and the history of the wider world. We examine a variety of them, and try to answer three questions about each one. (1) Why did the United States decide to carry out a particular intervention? (2) How was the intervention executed? (3) What have been its long-term effects?

Fall INTL1443 S01 17039 TTh 9:30-10:50(15) (S. Kinzer)

INTL 1700. International Law. This introduction to public international law covers the nature of legal reasoning in international relations, the interplay of international law and international politics, and the international legal process. Examines selected substantive fields such as state responsibility, the use of force, international human rights, and the U.S. and international law.

Fall INTL1700 S01 17388 TTh 9:00-10:20(08) "To Be Arranged"
INTL 1802D. Religion, Politics and Society: Israel in a Comparative Perspective.
This course explores contemporary dilemmas of religion and politics in Israel, drawing from different theoretical sources and using other case studies it allows a study of Israel in a comparative perspective and hopes to engage in debates relevant to all. During the course we discuss general theories of secularization, religious revival, politics and religion and different models of the historical and institutionalization of religion in Israeli society, and engage with contemporary dilemmas of religion and politics salient in Israel and elsewhere. Enrollment limited to 20 juniors and seniors. Priority given to IR seniors. WRIT
Fall INTL1802D S01 17071 Th 4:00-6:30(04) "To Be Arranged"

INTL 1802V. Diplomacy, Economics & Influence.
This course examines a dozen diplomatic situations and identifies the players, their interests, and their tools -- and how those produced outcomes. Particular attention is paid to economic factors -- pressures, incentives, and influences -- that contribute to the outcome. By examining these elements students will understand the economic tools of diplomacy and power, and how to wield them. The course concludes with a close look at China's growing role in the world economy and considers how that will change China's role in world affairs. Enrollment limited to 20 Juniors & Seniors. Priority given to IR seniors. WRIT
Fall INTL1802V S01 17234 Th 4:00-6:30(04) (R. Boucher)

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)

INTL 1803M. Reassessing Contentious Politics, and Social Movements.
This course introduces the major theories of social movements that explain the origins, dynamics, and consequences of contentious politics. We concentrate on the Middle East, the First and Second Palestinian Intifadas, and Arab Spring uprisings; examining how social movement theory helps us to understand these major episodes of mass mobilization and how these episodes prompt us to change our way of thinking about social movements and contentious politics more generally. We investigate social movement attributes such as movement emergence, member recruitment, leadership, organization, tactics, targets, and goals. Enrollment limited to 20. Priority to IR seniors and juniors. WRIT
Fall INTL1803M S01 17042 T 4:00-6:30(09) (M. Kadivar)

INTL 1803P. Grey Markets: The Illegal but Legitimate Economy.
This course investigates grey markets — commerce that is technically illegal, yet socially permitted and largely unoffensive. Unauthorized sales, intellectual property crimes (e.g. piracy, bootlegging, counterfeits), and evading customs tariffs and monitoring are constitutive examples of the grey market. These transactions skirt the interests of various actors, including firms, states, and societies. Limited to 20 juniors, seniors. Priority given to IR seniors. WRIT
Fall INTL1803P S01 17070 M 3:00-5:30(15) (R. Medriatta)

INTL 1803Q. Spheres of Influence: A Comparative Analysis.
This seminar exposes students to a concept that has played an important role in the history of international relations, was supposed to fade away when the Cold War ended, and has unexpectedly returned to play a central role in global politics. We study the origin of sphere-of-influence geopolitics and review episodes when it promoted stability or instability. This allows us to compare the ways that great powers have used this concept, and to predict how they may do so in the future. Enrollment limited to 20 juniors and seniors. Priority given to IR seniors. WRIT
Fall INTL1803Q S01 17269 W 3:00-5:30(17) (S. Kinzer)

INTL 1910. Senior Honors Seminar.
Open only to Senior students accepted into the honors program in international relations. Instructor permission required. WRIT
Fall INTL1910 S01 17040 W 6:30-9:00PM(02) (E. Steinfeld)

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(04) (C. Abbona-Sneider)
Fall ITAL0100 S01 15042 Th 1:00-2:20(04) (C. Abbona-Sneider)
Fall ITAL0100 S02 15043 Th 9:00-10:20(04) (C. Abbona-Sneider)
Fall ITAL0100 S02 15043 MW 10:00-10:50(04) (C. Abbona-Sneider)
Fall ITAL0100 S03 15044 Th 10:30-11:50(04) (C. Abbona-Sneider)
Fall ITAL0100 S03 15044 MW 11:00-11:50(04) (C. Abbona-Sneider)

ITAL 0110. Intensive Elementary Italian.
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.
Spr ITAL0110 S01 24060 MTWTThF 12:00-1:50(05) (C. Abbona-Sneider)

ITAL 0200. Elementary Italian.
See Elementary Italian (ITAL 0100) for course description.
Spr ITAL0200 S01 24061 MW 1:00-1:50(12) (C. Abbona-Sneider)
Spr ITAL0200 S01 24061 Th 1:00-2:20(12) (C. Abbona-Sneider)
Spr ITAL0200 S02 24062 Th 9:00-10:20(12) (C. Abbona-Sneider)
Spr ITAL0200 S02 24062 MW 10:00-10:50(12) (C. Abbona-Sneider)
Spr ITAL0200 S03 24063 Th 10:30-11:50(12) (C. Abbona-Sneider)
Spr ITAL0200 S03 24063 MW 11:00-11:50(12) (C. Abbona-Sneider)

ITAL 0300. Intermediate Italian I.
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.
Fall ITAL0300 S01 15045 MTWTTh 12:00-12:50(15) (C. Abbona-Sneider)
Fall ITAL0300 S02 15049 MTWTTh 11:00-11:50(15) (C. Abbona-Sneider)
ITAL 0400. Intermediate Italian II.
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.
Spr ITAL0400 S01 24064 MTWTh 11:00-11:50(17) (C. Abbona-Sneider)

ITAL 0500. Advanced Italian I.
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.
Fall ITAL0500 S01 15051 MTWTh 12:00-12:50(12) (C. Abbona-Sneider)

ITAL 0600. Advanced Italian II.
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.
Spr ITAL0600 S01 24065 TWTh 12:00-12:50(05) (C. Abbona-Sneider)

ITAL 1000G. Italian Identity.
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.
Fall ITAL1000G S01 16338 TTh 2:30-3:50(03) (F. Fantarella)

ITAL 1010. Dante in English Translation: Dante’s World and the Invention of Modernity.
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
Fall ITAL1010 S01 16339 TTh 1:00-2:20(10) (R. Martinez)

ITAL 1020. Boccaccio’s Decameron.
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
Spr ITAL1020 S01 25057 TTh 10:30-11:50(09) (M. Riva)

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 "virtual reality." 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.
Spr ITAL1340 S01 25059 M 3:00-5:30(13) (M. Riva)

ITAL 1390. Modern Italy.
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.
Spr ITAL1390 S01 25058 TTh 10:30-11:50(09) (D. Kertzer)

ITAL 1431. Truth on Trial: Justice in Italy, 1400-1800 (HIST 1262M).
Interested students must register for HIST 1262M.
Fall ITAL1431 S01 17542 Arranged ”To Be Arranged"

ITAL 1610. The Divina Commedia: Inferno and Purgatorio.
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.
Fall ITAL1610 S01 16340 T 4:00-6:30(04) (R. Martinez)

ITAL 1620. The Divina Commedia: Dante's Paradiso: Justifying a Cosmos.
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.
Spr ITAL1620 S01 25063 T 4:00-6:30(17) (R. Martinez)

ITAL 1920. Independent Study Project (Undergraduate).
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.

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 T 12:00-2:20(10) (C. Castiglione)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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.).
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 informed questions on the topic presented. Presentations in both Italian and English. Instructor permission required.
Fall ITAL2820 S01 16345 F 12:00-1:30(12) (R. Martinez)
Spr ITAL2820 S01 25062 F 12:00-1:30(05) (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"

Judaeo Studies

Hebrew

HEBR 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. Prerequisite: HEBR 0100. Students must have taken HEBR 0100 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.
Fall HEBR0100 S01 15131 TTh 1:00-2:20(06) (R. Adler Ben Yehuda)
Fall HEBR0100 S01 15131 MWF 1:00-1:50(06) (R. Adler Ben Yehuda)

HEBR 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 0100. Students must have taken HEBR 0100 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 HEBR0200 S01 24138 TTh 1:00-2:20(06) (R. Adler Ben Yehuda)
Spr HEBR0200 S01 24138 MWF 1:00-1:50(06) (R. Adler Ben Yehuda)

HEBR 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 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 HEBR0300 S01 15132 TTh 12:00-12:50(12) (R. Adler Ben Yehuda)
Fall HEBR0300 S01 15132 MWF 12:00-12:50(12) (R. Adler Ben Yehuda)

HEBR 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 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 HEBR0400 S01 24139 TTh 12:00-12:50(05) (R. Adler Ben Yehuda)
Spr HEBR0400 S01 24139 MWF 12:00-12:50(05) (R. Adler Ben Yehuda)

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 Israeli 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)
JUDS 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 origin; 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 WRIT
Spr HEBR0600 S01 24140 TTh 9:00-10:20(01) (D. Jacobson)

Judaic Studies

JUDS 0050H. 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 JUDS0050HS01 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 neighbour, 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 migration 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)

Interested students must register for RELS 0022.
Fall JUDS0062 S01 17143 Arranged "To Be Arranged"

JUDS 0062. Gender in Early Jewish and Christian Texts (RELS 0195).
Interested students must register for RELS 0195.
Fall JUDS0062 S01 17144 Arranged "To Be Arranged"

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 JUDS0063 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 over 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)

Interested students must register for RELS 0088.
Fall JUDS0685 S01 16907 Arranged "To Be Arranged"

JUDS 0686. The Ten Commandments.
A history of the Ten Commandments from the Bible to today. How have the commandments been understood by Jews and Christians throughout time? What symbolic importance have they had? WRIT
Fall JUDS0686 S01 17123 M 3:00-5:30(15) (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-structuring 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)

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 has emerged. This first year seminar will present an historical survey of the Israeli-Arab wars and Jewish-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.
Fall JUDS1711 S01 24144 TTh 1:00-2:20(10) (R. Rojanski)

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 exploitative -- 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.
An immersive approach using authentic communication inside and outside of the classroom will be used to develop introductory communicative skills in American Sign Language. Authentic materials from diverse sources will provide an overview of the American Deaf community. Basic media literacy skills will be taught. 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 S02 15054 MTWThF 12:00-12:50(12) (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 postures), 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 S02 24072 MTWThF 12:00-12:50(05) (T. Riker)

SIGN 0300. American Sign Language III.
This course will use an immersive approach incorporating authentic communication to develop intermediate communicative skills in American Sign Language. Through authentic materials from diverse sources, students will engage in classroom discussion and produce media to explore Deaf cultural topics related to family dynamics, language and literacy, and education. Prerequisite SIGN0200 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.
This courses increases American Sign Language skills by introducing advanced vocabulary and grammar in various registers and settings, including informal and formal discussions, presentations, and storytelling. Through authentic materials from diverse sources, students will explore American Sign Language literature and oral traditions. Prerequisite SIGN0400 or placement interview. 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

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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 MW 9:00-9:50(01) (M. Christoff)
Fall ARAB0200 S01 24962 TTh 9:00-10:20(01) (M. Christoff)
Spr ARAB0200 S02 24963 TTh 10:30-11:50(12) (A. Hassan)
Spr ARAB0200 S02 24963 MW 11:00-11:50(12) (A. Hassan)
Spr ARAB0200 S03 24964 MW 2:00-2:50(12) (A. Hassan)
Spr ARAB0200 S03 24964 TTh 2:30-3:50(12) (A. Hassan)
Spr ARAB0200 S04 24970 MW 1:00-1:50(12) (A. Hassan)
Spr ARAB0200 S04 24970 TTh 1:00-2:20(12) (A. Hassan)

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.
Fall ARAB0300 S01 15055 MW 10:00-10:50(13) (M. Christoff)
Fall ARAB0300 S01 15055 TTh 10:30-11:50(13) (M. Christoff)
Fall ARAB0300 S02 15254 MW 1:00-1:50(13) (M. Faiza)
Fall ARAB0300 S02 15254 TTh 1:00-2:20(13) (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 10:00-10:50(09) (M. Christoff)
Spr ARAB0400 S01 24965 TTh 10:30-11:50(09) (M. Christoff)
Spr ARAB0400 S02 24966 MW 1:00-1:50(10) (M. Faiza)
Spr ARAB0400 S02 24966 TTh 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 MTWTh 12:00-12:50(15) (M. Faiza)
Fall ARAB0500 S02 17019 MTWTh 11:00-11:50(15) (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(12) (M. Faiza)
Spr ARAB0600 S02 25675 MTWTh 11:00-11:50(12) (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(12) (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. DPLL
Spr ARAB0800 S01 24969 TTh 2:30-3:50(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

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 International Students

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(16) (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(12) (A. Hassan)
Spr EINT2200 S01 24197 MTWTh 12:00-12:50(05) (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(01) (B. Gourlay)
Spr EINT2300 S01 24198 MTWTh 9:00-9:50(02) (B. Gourlay)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 MW 9:00-9:50(01) (M. Leuchak)
Fall: EINT2400 S02 15210 TTh 9:00-9:50(08) (M. Leuchak)
Spr: EINT2400 S01 24200 MW 9:00-9:50(13) (B. Gourlay)
Spr: EINT2400 S02 24201 TTh 9:00-9:50(13) (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(16) (B. Gourlay)
Spr: EINT2500 S01 24199 MTWTh 11:00-11:50(04) (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.
Fall: HNDI0100 S01 15211 MTWThF 12:00-12:50(12) (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(05) (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 Th 4:00-4:50(06) (A. Koul)
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(01) (E. Balci)

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 (J. Terantino)

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)

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)
Fall: 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 Th 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 T 2:30-3:50(03) (I. Anvar)

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

PRSN 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.

Turkish

TKSH 0100. Introduction to Turkish Language and Culture I.
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(07) (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 advanced 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)

Yoruba

YORU 0100. First Year Yoruba I.
The first semester of two-semester beginner's course in Yoruba Language and Culture. This class aims to offer Yoruba language skills and proficiency in speaking, reading, listening, writing, and translation. Focus is placed on familiar informal and formal contexts, e.g., home, school, work, family, social situations, politics, etc. Course uses Yoruba oral literature, proverbs, rhetoric, songs, popular videos, and theater, as learning tools for class comprehension. First semester focuses on conversation, speaking, and listening. Both semesters are required in order for students to earn credit in the course.
Fall YORU0100 S01 17296 Arranged (E. Balci)

YORU 0200. First Year Yoruba II.
The second semester of two-semester beginner's course in Yoruba Language and Culture. This course aims to offer Yoruba language skills and proficiency in speaking, reading, listening, writing, and translation. Focus is placed on familiar informal and formal contexts, e.g., home, school, work, family, social situations, politics, etc. Course uses Yoruba oral literature, proverbs, rhetoric, songs, popular videos, and theater, as learning tools for class comprehension. While first semester focuses on conversation, speaking, and listening, second semester focuses on writing, translation and grammatical formation. Both semesters are required in order for students to earn credit in the course.
Spr YORU0200 S01 25855 Arranged (E. Balci)

Latin American and Caribbean Studies

LACA 0233. Colonial Latin America (HIST 0233).
Interested students must register for HIST 0233.
Fall LACA0233 S01 17255 Arranged 'To Be Arranged'

Interested students must register for COLT 0510F.
Fall LACAO510F S01 17221 Arranged 'To Be Arranged'

LACA 0610E. Crisis and Identity in Mexico, 1519-1968 (COLT 0610E).
Interested students must register for COLT 0610E.
Fall LACAO610E S01 17211 Arranged 'To Be Arranged'

LACA 0637A. History of Jews in Brazil (HIST 0637A).
Interested students must register for HIST 0637A.
Fall LACAO637A S01 17256 Arranged 'To Be Arranged'

LACA 0730. Encounters: Latin American in its Literature and Culture (HISP 0730).
Interested students must register for HISP 0730.
Fall LACAO730 S01 17216 Arranged 'To Be Arranged'

LACA 0850. Comparative Approaches to the Literatures of Brazil and the United States (POBS 0850).
Interested students must register for POBS 0850.
Fall LACAO850 S01 17222 Arranged 'To Be Arranged'

LACA 1310. History of Brazil (HIST 1310).
Interested students must register for HIST 1310.
Fall LACA1310 S01 17225 Arranged 'To Be Arranged'

LACA 1330T. El Amor en Español (HISP 1330T).
Interested students must register for HISP 1330T.
Fall LACA1330T S01 17213 Arranged 'To Be Arranged'

LACA 1330Z. Tropical Fictions: Geography and Literature in Latin American Culture (HISP 1330Z).
Interested students must register for HISP 1330Z.
Fall LACA1330Z S01 17214 Arranged 'To Be Arranged'

LACA 1333. The Mexican Revolution (HIST 1333).
Interested students must register for HIST 1333.
Fall LACA1333 S01 17224 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
LACA 1503H. Sexuality, Human Rights and Health: Latin American Perspective and Brazilian Experiences.
This course is presented in 4 sections. Section 1. Provides an overview on how sexuality and health, both defined by biological paradigms, met social constructionism and human rights perspectives which flourished in Latin America. Section 2. Provides an overview of the human rights based health approach and provide Brazilian cases. Section 3. Provides an overview to the multicultural human rights based approach to sexuality education. Section 4. Expands the dialogical approach of this course by discussing sexuality research and human rights health based interventions in relation with students brought cases.
Fall LACA1503HS01 16990 W 3:00-5:30(17) "To Be Arranged"

LACA 1503I. Fiction and Methods in Social Research: Debates on Inequality, Poverty, and Violence.
In this course, students will read, comment, and discuss renowned novels on inequality, exclusion, poverty, and (political, religious, racial, and gender) violence in cases as diverse as Nigeria, India, and Afghanistan. These novels will submerge students in some of the complexities and richness of the selected cases. By reading them, students will explore and discuss concepts, stories and historical context, political and socioeconomic processes, the roles of characters, and arguments.
Spr LACA1503I S01 25731 M 3:00-5:30(13) "To Be Arranged"

LACA 1503J. Latin American Urban Interventions.
This seminar engages with narratives of modernization and their relation to time and space in Latin America through cultural artifacts that represent urban interventions designed to improve “the human condition.” Is there an informal Latin American mode of modernity? Are urban interventions condemned to reproduce social exclusion? We review literature on Latin American urban complexes and a case study on a massive residential and commercial complex built in downtown Caracas in the 1970s called Parque Central, including original brochures, shorts stories, poems, excerpts from novels, photos, artwork, films, plays, songs, and performances. Readings will be in English and Spanish and the course will be conducted in Spanish.
Spr LACA1503J S01 25759 W 3:00-5:30(14) "To Be Arranged"

LACA 1601A. Latin American Literature in an Era of Globalization.
This course will explore the impact of globalization on contemporary Latin American Literature. We will analyze novels, short stories and critical discourses produced by Latin American writers in the past thirty years and shed light on how the awareness of the globalized world has transformed writing practices as well as the setting and the construction of narratives. The course will examine the trade-offs associated with the process of globalization, highlighting the beneficial aspects of hypermobility, fluidity, and transnationalism, as well as the dark sides of globalization linked to time and space in Latin America through cultural artifacts that represent urban interventions designed to improve “the human condition.” Is there an informal Latin American mode of modernity? Are urban interventions condemned to reproduce social exclusion? We review literature on Latin American urban complexes and a case study on a massive residential and commercial complex built in downtown Caracas in the 1970s called Parque Central, including original brochures, shorts stories, poems, excerpts from novels, photos, artwork, films, plays, songs, and performances. Readings will be in English and Spanish and the course will be conducted in Spanish.
Fall LACA1601AS01 17080 TTh 2:30-3:50(03) (E. Durante)

LACA 1650. Ancient Maya Writing (ANTH 1650).
Interested students must register for ANTH 1650.
Fall LACA1650 S01 17208 Arranged "To Be Arranged"

LACA 1966Q. Colonial Encounters and the Creation of Latin America (HIST 1966Q).
Interested students must register for HIST 1966Q.
Fall LACA1966QS01 17223 Arranged "To Be Arranged"

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.

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.

LACA 2520L. Latin American Existential Literature (HISP 2520L).
Interested students must register for HISP 2520L.
Fall LACA2520L S01 17212 Arranged "To Be Arranged"

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/N/C required. FYS WRIT
Fall LITR0100A S01 16869 F 3:00-5:30(11) (G. Adeola)
Fall LITR0100A S02 16675 Th 6:30-8:00PM(05) (E. Yi)
Spr LITR0100A S01 25339 F 3:00-5:30(13) "To Be Arranged"
Spr LITR0100A S02 25834 W 6:00-8:30PM(13) "To Be Arranged"

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/N/C required. FYS WRIT
Fall LITR0100B S01 16677 Th 6:30-9:00PM(05) "To Be Arranged"
Fall LITR0100B S02 17107 F 3:00-5:30(11) "To Be Arranged"
Spr LITR0100B S01 25340 F 3:00-5:30(15) "To Be Arranged"
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
Fall LITR0110A S01 16679 T 6:40-9:10PM(05) 'To Be Arranged'
Fall LITR0110A S02 16680 T 6:40-9:10PM(05) 'To Be Arranged'
Fall LITR0110A S03 16681 Th 6:40-9:10PM(05) 'To Be Arranged'
Spr LITR0110A S01 25341 M 6:00-8:30PM(08) 'To Be Arranged'
Spr LITR0110A S02 25342 T 4:00-6:30(13) 'To Be Arranged'
Spr LITR0110A S03 25343 Th 6:40-9:10PM(13) 'To Be Arranged'

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
Fall LITR0110B S01 16682 M 6:00-8:30PM(02) 'To Be Arranged'
Fall LITR0110B S02 16683 T 4:00-6:30(09) 'To Be Arranged'
Fall LITR0110B S03 16684 Th 6:40-9:10PM(05) 'To Be Arranged'
Spr LITR0110B S01 25813 M 6:00-8:30PM(16) 'To Be Arranged'
Spr LITR0110B S02 25814 T 6:40-9:10PM(16) 'To Be Arranged'
Spr LITR0110B S03 25815 Th 6:40-9:10PM(16) 'To Be Arranged'

LITR 0110D. Digital Language Art I.
Project-oriented workshop for writers, visual/sound artists, filmmakers and programmers who wish to explore digital media techniques. No experience working in this field (or with computer programming) required. You’ll learn through doing, reading, talking and collaborating on works in various traditions. Enrollment limited to 17. S/NC. WRIT
Fall LITR0110D S01 17043 T 4:00-6:30(09) 'To Be Arranged'
Fall LITR0110D S02 17050 M 3:00-5:30(17) 'To Be Arranged'
Spr LITR0110D S01 25803 T 4:00-6:30(17) 'To Be Arranged'
Spr LITR0110D S02 25804 W 3:00-5:30(17) 'To Be Arranged'

LITR 0110E. Screenwriting I.
This workshop introduces the fundamentals of screenwriting through a variety of readings, exercises and assignments. Our main focus will be on students’ writing, with particular emphasis on exploring the cinematic potential of your stories and themes, and on developing structures that best suit your material and intentions. This course is limited to undergraduates. S/NC. Enrollment limited to 17. WRIT
Fall LITR0110E S01 16732 W 3:00-5:30(17) (L. Colella)
Spr LITR0110E S01 25414 W 3:00-5:30(14) (L. Colella)

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
Fall LITR0210A S01 16099 W 3:00-5:30(17) (J. Howard)
Fall LITR0210A S02 16100 T 4:00-6:30(09) (A. Colarusso)
Spr LITR0210A S01 24846 W 3:00-5:30(14) (J. Howard)
Spr LITR0210A S02 24847 T 4:00-6:30(16) 'To Be Arranged'

LITR 0210B. Poetry Writing II.
Emphasis is placed on verse strategies, meter, rhythm, imagery and rhyme. Writing includes frequent exercises in various poetic traditions. See general course description above for course entry procedures for all intermediate workshops. Written permission required. S/NC. WRIT
Fall LITR0210B S01 16687 T 4:00-6:30(09) (P. Riedy)
Spr LITR0210B S01 25846 T 4:00-6:30(16) 'To Be Arranged'

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 automatons; 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
Fall LITR0510B S01 16098 T 4:00-6:30(09) (J. Howard)

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
Fall LITR0710 S01 16095 Th 4:00-6:30(04) (L. Swensen)
Spr LITR0710 S01 24849 Th 4:00-6:30(17) 'To Be Arranged'

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
Fall LITR1010A S01 16096 Th 10:30-1:00(13) (M. Steinbach)
Spr LITR1010A S01 24843 Th 10:30-1:00(09) (M. Steinbach)

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
Fall LITR1010B S01 16103 M 3:00-5:30(15) (P. Nelson)
Spr LITR1010B S01 24850 M 3:00-5:30(13) (M. de la Torre)

LITR 1010E. Advanced Screenwriting.
The writing of short screenplays or a longer work in progress in regular installments, along with a body of exercises, workshop conversations and conferences. See general course description above for course entry procedures for all advanced workshops. Instructor permission required. S/NC. WRIT
Fall LITR1010E S01 16734 T 10:00-12:30(08) (L. Colella)
Spr LITR1010E S01 25415 M 9:15-11:45(02) (L. Colella)

LITR 1010G. Writing3D.
An advanced experimental workshop for writing in immersive 3D, introducing text, sound, spatial poetics, and narrative movement into Brown's Legacy Cave (now house in the Granoff Center for the Creative Arts) with links to the YURT (Yurt Ultimate Reality Theater in the Center for Computation and Visualization). An easy-to-learn and easy-to-use application allows non-programmers to create projects on laptops and then to run them in immersive 3D audiovisuality without the necessity for specialist support. Broadly interdisciplinary, the course encourages collaboration between students with different skills in different media, who work together to discover a literary aesthetic in artificially rendered space. WRIT
Fall LITR1010G S01 16735 M 3:00-5:30(15) (J. Cayley)

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
Spr LITR1110N S01 24851 M 3:00-5:30(13) (P. Nelson)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
LITR 1110R. Performance Dimensions of Text.
This workshop (modeled on a traditional "ateliers") 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 experiment 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

Fall LITR1110R S01 25863 T 12:00-2:30(10) (T. Field)

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, Keesey, Joyce, McCullers, Morrison, Nabokov, O'Connor, Thompson, Walker, Spielberg, Woff, Yamamoto as directed by Burton, Forman, Felini, Gilliam, Huston, Jordan, Kurasawa, Lee, Potter, and others. Class and weekly screenings. Enrollment limited to 12. S/NC. WRIT

Fall LITR1110S S01 16097 T 10:30-1:00(13) (M. Steinbach)

LITR 1151L. World Tour: Recent Poetry in Translation.
This is a reading, writing, translation, and discussion class. Commit to a vigorous combination of all four. Some translation theory will be reviewed, but the emphasis of the course is upon models of translations. Texts will include translations of books by Laszlo Krasznahorkai, Jean Frenon, Yoshimasu Gozo, Kim Hysoon, Anja Utler, Adonis, and others. Enrollment limited to 12. S/N/D DPLL WRIT

Fall LITR1151L S01 17196 W 3:00-5:30(17) (F. Gander)

LITR 1151O. Ideas of Narration Before Don Quixote.
We shall read fictional narratives (and some narrative poetry) from the first moments of preserved literature up to Don Quixote, for clues about how earlier writers thought about form and narration. Of what was narrative fashioned before "omniscience" was a relevant term? Before there was a science of psychology that could speak to the protagonists? What can we say about the diversity and unpredictability of early narrative writing, and how does that contrast with the more consistent look and feel of the nineteenth century? How can these "ancient fictions" inform an interest in narrative innovation and formal ingenuity today?

Fall LITR1151O S01 17469 T 4:00-6:30(09) (H. Moody)

LITR 1151P. Documentary Poetics.
This course will explore 20th and 21st century documentary poetic texts to provide points of discussion and inspiration for our own investigative poetry. We'll look at a range of works, from those confronting the legal record to those creating their own record of the infraordinary quotidian (Perec's term), and discuss the various aesthetic, ethical, social, and procedural questions raised. Participants will be asked to develop and create their own final documentary poetic projects. Readings will include works by Reznikoff, Niedecker, Williams, M. NourbeSe Philip, C.D. Wright, Yoshimasu Gozo, Kim Hysoon, Anja Utler, Adonis, and others. Enrollment limited to 12. S/N/D DPLL WRIT

Fall LITR1151P S01 17470 W 3:00-5:30(17) (E. Sikilianos)

LITR 1151Q. Great Adventure.
This hybrid seminar/prose workshop will take you to Antarctica, Japan, France, Cambodia, outer space—and to other places too. But much of your writing will be about yourself. Your cross-genre wandering through novels, essays, and indefinable hybrid works by a fascinating list of thinkers and stylists, will lead to questions about your own sense of place, belonging, contextual otherness, and the pleasures, powers and implications of your gaze. You'll search for answers through the medium of your own creative work—lyric essays, fictional vignettes, pictures. WRIT

Fall LITR1151Q S01 17482 W 3:00-5:30(17) (C. Channer)

LITR 1151R. Ecstatic Alphabets: Poetry by Other Means.
How to do things with words? How to do words with things? The latter is a question whose answers might prove as—if not more—compelling than its familiar inverse. Both are at the core of this course focusing on interdisciplinary works for which notions intrinsic to poetry serve as either springboard or endpoint. We will study contemporary examples as well as historical antecedents, and will experiment with producing genre-defying works that animate the written word. Among the strategies we will cover are verboviscous works, cut-ups and collage, sound poetry and concrete poetry, happenings, agitprop, poets theater, and dance. WRIT

Fall LITR1151R S01 17575 W 3:00-5:30(17) (M. de la Torre)

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) (C. Maso)
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 1231C. Experimental Poets of Color.
In this course we'll read and critically engage with contemporary experimental poets of color writing in English in the US and Canada. Exploring the intersection of poetics, aesthetics, critical race (and mixed race) theory, and social justice activism in the arts, we will question the modernist and post-modernist assumptions that experimentation and innovation are exclusively the domain of whiteness. We will explore how racism, colonialism, and other contemporary systems of oppression condition responses to poets of color, and consider how poets of color respond to and engage with these systems both overtly and through their aesthetic experimentation. DPLL WRIT

Spr LITR1231C S01 25891 Arranged (E. Mena-Landy)

LITR 1231E. Rereading Writing.
We will study writing and, more generally, language art in terms of reading, both reexamining theories and practices of writing — in linguistics, the philosophy of language, and in the actual making of literature — and also by proposing that reading is constitutive of language regardless of its medium. What is reading, historically, theoretically, and in the digitally mediated future of culture? If reading brings language into being, then how should we read and what should we compose to be read? Readings from Saussure and Ong to Hayles, Derrida, and beyond. Optional critical-creative project. WRIT

Fall LITR1231E S01 17048 W 3:00-5:30(17) (J. Cayley)

LITR 1231F. Listening/Voicing.
"How you sound??" the poet Amiri Baraka once asked. This seminar is concerned with acts of communication as pertaining to voicing and listening. How do poets sound out in the world, and to whom? We will explore notions of voice as more than a site of identity production, looking at, for example, the various fractures possible in Sappho’s "voice" and what is carried to us through history, while also considering forms of singular and social condition responses to poets of color, and consider how poets of color respond to and engage with these systems both overtly and through their aesthetic experimentation. DPLL WRIT

Fall LITR1231F S01 17483 M 3:00-5:30(15) (E. Sikilianos)

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.

LITR 1410A. Fiction Honors. A workshop setting for the completion of theses by advanced writers of fiction. See general course description above for course entry procedures for all honors workshops. Instructor permission required. Enrollment limited to 12 senior Literary Arts concentrators. S/NC.

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.

LITR 2010A. Graduate Fiction. 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.

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.

LITR 2110N. Drive, he sd: Robert Creeley & Co.. This is a reading, writing, and discussion class. Robert Creeley was one of the signal North American writers in the last 50 years. His voluminous correspondence, collaborations, and friendships altered the landscape of 20th Century Poetry in English and in other languages. We will read his poems, letters, and see interviews and collaborative projects. Students will write poems, letters, and do collaborations and presentations. Field trip to Creeley’s grave; guest speakers; etc. etc. Enrollment limited to 12. S/NC.

LITR 21100. Dialogue, Monologue, & Diaclet. This graduate-level hybrid workshop/seminar will use works of fiction, cinema, theater, and narrative poetry as beginning points for experiments and discussions centered on a wide range of concepts and practices designed to widen how they hear and see the possibilities of voice and body language in their work. Special attention will be paid to regional and international, especially hybrid, forms of English. Writing assignments will be short but varied in form and constraint. Students will be encouraged to use works-in-progress as material for play and trial-and-error. Some assignments will be written. Others will involve live "off-book" storytelling and improv.

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.
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(09) (J. Conde Alonso)
Fall MATH0170 S02 15940 MWF 9:00-9:50(09) (S. Fan)
Fall MATH0170 S03 15941 TTh 9:00-10:20(09) (A. Weber)

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(09) 'To Be Arranged'
Fall MATH0180 S02 15943 MWF 1:00-1:50(09) (M. Nastasescu)
Fall MATH0180 S03 15944 TTh 1:00-2:20(09) 'To Be Arranged'
Spr MATH0180 S01 24723 MWF 9:00-9:50(15) 'To Be Arranged'
Spr MATH0180 S02 24724 MWF 12:00-12:50(15) 'To Be Arranged'
Spr MATH0180 S03 24725 TTh 1:00-2:20(15) '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(09) (Y. Wu)
Fall MATH0190 S02 15950 TTh 1:00-2:20(09) '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(09) 'To Be Arranged'
Fall MATH0200 S02 15955 MWF 12:00-12:50(09) 'To Be Arranged'
Fall MATH0200 S03 15956 TTh 2:30-3:50(09) (W. Lam)
Spr MATH0200 S01 24730 MWF 12:00-12:50(15) 'To Be Arranged'
Spr MATH0200 S02 24731 MWF 1:00-1:50(15) 'To Be Arranged'
Spr MATH0200 S03 24732 MWF 2:00-2:50(15) 'To Be Arranged'

MATH 0350. Honors Calculus.
A three-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 2:30-3:50(09) (S. Watson)
Fall MATH0350 S03 17457 MWF 2:00-2:50(07) (B. Cole)

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 MATH 0540 is a prerequisite for all 1000-level courses in Mathematics except MATH 1260 or MATH 1610. Recommended prerequisite: MATH 0180, MATH 0200, or MATH 0350. May not be taken in addition to MATH 0540.

Fall MATH0520 S01 15963 MWF 10:00-10:50(18) (S. Fan)
Fall MATH0520 S02 15964 MWF 11:00-11:50(18) (M. Nastasescu)
Fall MATH0520 S03 15965 MWF 2:00-2:50(18) 'To Be Arranged'
Spr MATH0520 S01 24745 MWF 9:00-9:50(12) 'To Be Arranged'
Spr MATH0520 S02 24746 MWF 11:00-11:50(12) 'To Be Arranged'
Spr MATH0520 S03 24747 MWF 12:00-12:50(12) 'To Be Arranged'
Spr MATH0520 S04 24748 TTh 1:00-2:20(12) (W. Lam)
Spr MATH0520 S05 24749 TTh 10:30-11:50(12) (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 S02 15967 MWF 1:00-1:50(18) (Y. Wu)
Spr MATH0540 S01 24750 MWF 11:00-11:50(12) (S. Treil)
Spr MATH0540 S02 24751 MWF 1:00-1:50(12) '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 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) (J. Pipper)

MATH 0760. Introduction to Higher Mathematics.
This year-long class will expose students to six fundamental areas of mathematics. It will be 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.

Spr MATH0760 S01 24763 TTh 1:00-2:20(10) 'To Be Arranged'

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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MATH 110. 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) (B. Pausader)

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.
Prerequisites: MATH 0520 or MATH 0540, or instructor permission.
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 1410. Combinatorial Topology.
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 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 02:00-2:50(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) (J. Conde Alonso)

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 24764 MWF 01:00-1:50(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 MATH1810A S01 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.

MATH 2110. Differential Geometry.
Introduction to differential geometry (differentiable manifolds, differential forms, tensor fields, homogeneous spaces, fiber bundles, connections, Riemannian geometry), followed by selected topics in the field.
Fall MATH2110 S01 15978 MWF 10:00-10:50(03) (N. Kapouleas)

MATH 2050. Algebraic Geometry.
Complex manifolds and algebraic varieties, sheaves and cohomology, vector bundles, Hodge theory, Kahler manifolds, vanishing theorems, the Kodaira embedding theorem, the Riemann-Roch theorem, and introduction to deformation theory.
Fall MATH2050 S01 15979 MWF 10:00-10:50(14) (M. Chan)

MATH 2060. Geometric Topology. See Algebraic Geometry (MATH 2050) for course description.
Spr MATH2060 S01 24765 MWF 11:00-11:50(04) (D. Abramovich)

MATH 2110. Introduction to Manifolds.
Inversive 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 TTh 09:00-10:20(01) (G. Daskalopoulos)
MATH 2210. Real Function Theory.
Point set topology, Lebesgue measure and integration, Lp spaces, Hilbert space, Banach spaces, differentiability, and applications.
Fall MATH2210 S01 15980 MWF 11:30-12:20(16) (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 MWF 2:00-2:50(07) (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 MWF 1:00-1:50(06) (S. Treil)

MATH 2260. Complex Function Theory.
See Complex Function Theory (MATH 2250) for course description.
Spr MATH2260 S01 24768 MWF 1:00-1:50(06) (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 TTh 10:30-11:50(13) (T. Goodwillie)

MATH 2420. Topology.
See Topology (MATH 2410) for course description.
Spr MATH2420 S01 24769 TTh 2:30-3:50(11) (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 MWF 2:00-2:50(07) (S. Lichtenbaum)

MATH 2520. Algebra.
See Algebra (MATH 2510) for course description.
Spr MATH2520 S01 24770 TTh 1:00-2:20(10) (M. Rosen)

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 TTh 2:30-3:50(03) (J. Hoffstein)

MATH 2540. Number Theory.
See Number Theory (MATH 2530) for course description.
Spr MATH2540 S01 24771 TTh 10:30-11:50(09) (J. Hoffstein)

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.

MATH 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 MATH2990 S01 15004 Arranged 'To Be Arranged'
Spr MATH2990 S01 24028 Arranged 'To Be Arranged'

MATH XLIST. Courses of Interest to Graduate Students Majoring in Mathematics.

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 0360. Cities: Medieval Perspectives.
Where did our modern cities come from? How does the medieval city still live in modernity? In this course, we study histories of cities, their making, transformation, or disappearance, through the lens of a series of medieval urban centers (such as Rome, London, Damascus, Constantinople/ Istanbul, and Toledo), some of which had a continued existence into the modern world. We will focus on such topics as: the end of ancient cities; religious beliefs, conflict, and tolerance; the city and its margins; citizens and foreigners; societies without cities; book culture and bureaucracy; the city as metaphor; sex (and romance) and the city.
Spr MDVL0360 S01 25676 M 3:00-5:30(13) (E. Papaioannou)

MDVL 0600. Literary Worlds of Late Antiquity (CLAS 0600).
Interested students must register for CLAS 0600.
Fall MDVL0600 S01 17327 Arranged 'To Be Arranged'

MDVL 0660. The World of Byzantium (CLAS 0660).
Interested students must register for CLAS 0660.
Spr MDVL0660 S01 25981 Arranged 'To Be Arranged'

MDVL 0910. Medieval and Renaissance Music (MUSC 0910).
Interested students must register for MUSC 0910.
Spr MDVL0910 S01 25921 Arranged 'To Be Arranged'

MDVL 1010. Dante in English Translation: Dante's World and the Invention of Modernity (ITAL 1010).
Interested students must register for ITAL 1010.
Fall MDVL1010 S01 17410 Arranged 'To Be Arranged'

MDVL 1110L. Medieval Latin Lyric (LATN 1110L).
Interested students must register for LATN 1110L.
Fall MDVL1110L S01 17326 Arranged 'To Be Arranged'

MDVL 1280. Death from Medieval Relics to Forensic Science (HIST 1280).
Interested students must register for HIST 1280.
Spr MDVL1280 S01 25927 Arranged 'To Be Arranged'

MDVL 1310E. A Classical Islamic Education: Readings in Arabic Literature (COLT 1310E).
Interested students must register for COLT 1310E.
Fall MDVL1310E S01 17411 Arranged 'To Be Arranged'

MDVL 1310T. Chaucer (ENGL 1310T).
Interested students must register for ENGL 1310T.
Fall MDVL1310T S01 16807 Arranged 'To Be Arranged'

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

The course examines visual politics in contemporary Middle Eastern society and grapples with fundamental debates in the study of 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 form the main framework, analyzing their political, social and cultural impact on intellectual production in the Ottoman Empire and through the making of Republican Turkey. It is a history of mentalities organized around 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. Fall MES1300 SO1 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.

Open only to Senior students accepted into the honors program in MES. Instructor permission required. WRIT

MES 1985. Shahs, Clerics and Poets: Cultural Representation in Modern Iran.
This course examines the history of modern Iran through primary historical documents, secondary studies and cultural production, beginning with an historical overview and attempts at historical narrative in the modern era, from the latter half of the Qajar dynasty (~1850) until today. Topics include modernist reform in the late-nineteenth and early twentieth centuries, Iranian identity, attempts at political reform, women’s movement and foreign affairs. The course emphasizes the debates of Iranian intellectuals and artists and how cultural representations of major historical events and socio-political changes contribute to and challenge historical narratives and how contemporary history and politics affects cultural representation.
Fall MES1985 SO1 17227 M 3:00-5:30(15) (A. Moosavi)

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,” Aimé Césaire refers to this as “thingification,” whereby colonial subjects are dehumanized and the colonizer “decivilized.” 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.

**Fall 2017**

The following related courses, offered in other departments, may be of interest to students concentrating in Middle East Studies. Please see the course listing of the sponsoring department for times and locations.

**Arabic**
- ARAB 0100 First-Year Arabic
- ARAB 0300 Second-Year Arabic
- ARAB 0500 Third-Year Arabic
- ARAB 0700 Advanced Arabic: Tales of the City

**Assyriology**
- ASYR 0300 Babylon: Myth and Reality
- ASYR 1000 Introduction to Akkadian
- ASYR 1150 Color and Culture in the Ancient Near East

**Classics**
- MGRK 1220 Decolonizing Classical Antiquity: White Nationalism, Colonialism, and Ancient Material Heritage

**Comparative Literature**
- COLT 0610Y Women’s Writing in the Arab World
- COLT 1310E A Classical Islamic Education: Readings in Arabic Literature
- COLT 1400F Nationalism and Transnationalism in Film and Fiction
- COLT 1813K The Problem of the Vernacular
- COLT 1814D East-West Encounters: Politics and Fictions of Orientalism
- COLT 1814T Maghrebi Fiction and Psychoanalysis

**Egyptology**
- EGYT 1310 Introduction to Classical Hieroglyphic Egyptian Writing and Language (Middle Egyptian I)
- EGYT 1330 Selections from Middle Egyptian Hieroglyphic Texts
- EGYT 1430 History of Egypt I

**English**
- ENGL 1561D Writing and the Ruins of Empire

**French Studies**
- FREN 1410T L’expérience des réfugiés/immigrés

**History**
- HIST 0244 Understanding the Middle East: 1800s to the Present
- HIST 1200C History of Greece: From Alexander the Great to the Roman Conquest
- HIST 1960Q Medicine and Public Health in Africa
- HIST 1968A Approaches to the Middle East
- HIST 1969K Islam in Turkey: Rumi to the Republic
- HIST 1969A Israel-Palestine: Lands and Peoples I
- HIST 1979K The Indian Ocean World International Relations

**International Relations**
- INTL 1802D Religion, Politics and Society: Israel in a Comparative Perspective
- INTL 1803M Reassessing Contentious Politics, and Social Movements

**Judaeic Studies**
- BHBR 0100 Introduction to Biblical Hebrew
- HEBR 0100 Elementary Hebrew
- HEBR 0300 Intermediate Hebrew
- HEBR 0500 Writing and Speaking Hebrew
- JUDS 0050H Israel’s Wars
- JUDS 0603 Race, Religion, and the Secular
- JUDS 0686 The Ten Commandments
- JUDS 0820 God and Poetry
- JUDS 1635 Problems in Israelite History
- JUDS 1713 Introduction to Yiddish Culture and Language

**Persian**
- PRSN 0100 Basic Persian
- PRSN 0300 Intermediate Persian Language and Culture
- PRSN 0500 Advanced Persian Language and Culture I

**Political Science**
- POLS 1822I Geopolitics of Oil and Energy

**Religious Studies**
- RELS 0022 Introduction to the New Testament
- RELS 0088 Judaism, Christianity, and Islam
- RELS 0195 Gender in Early Jewish and Christian Narratives
- RELS 0600C Radical Islam (?)

**Turkish**
- TKSH 0100 Introduction to Turkish Language and Culture I
- TKSH 0300 Intermediate Turkish

**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-Strauss, Derrida, Barthes, Marx, Freud, Fanon, Arendt, Foucault, 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(05) (B. Honig)

**MCM 0230. Digital Media.**

This course introduces students to the critical study of digital media. From sampling to simulation, technological anxiety to fully-automated luxury, surveillance to social media, and cyberpunk to cyberwar, we will analyze the aesthetics, politics, protocols, history, and theory of digital media as it intersects with various fields of knowledge and practice. Special attention will be paid to its impact on socio-cultural formations and its compromising of boundaries between the public and private, self and other, utopia and dystopia, and work and leisure, as well as to the interplay between technological and historical developments in the 1960s, 1990s, and the present.

Fall
MCM0230 S01 16934 MW 1:00-1:50(06) "To Be Arranged"

**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 Th 2:30-3:20(03) (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.

Fall
MCM0710 S01 17025 M 2:00-4:50(07) (J. Montgomery)

Spr
MCM0710 S01 24323 W 2:00-4:50(14) (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(04) (A. Cokes)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MCM 0750A. Art in Digital Culture
How do we produce, disseminate, and exchange images in a global networked society? How do digital technologies challenge conventions about art making, authorship, and audience? This production course introduces students to the practice, and critical inquiry into art in digital culture. The class will engage in contemporary debates on art and new media and will experiment with digital photography, video, and coding. Throughout the semester, students will work on a series of short projects, and a final individual or collaborative work. Artist case studies include Harun Farocki, Oliver Laric, and anonymous-memes-creators; readings include, Hito Steryer, David Josellit, and Boris Grosy.

Fall MCM0750A S01 17547 M 10:00-12:50 "To Be Arranged"
Spr MCM0750A S01 26042 M 10:00-12:50 "To Be Arranged"

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(03) (A. Cokes)

MCM 0901U. What is Colonialism - Archives, Texts and Images (COLT 0812B).
Interested students must register for COLT 0812B.

Spr MCM0901U S01 25660 Arranged "To Be Arranged"

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 interpretive 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 technocriticism. Rather than seeking to “rescue” cinema, we will instead explore how “the cinema” 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)

Interested students must register for EAST 1270.

Spr MCM1202D S01 25810 Arranged "To Be Arranged"

MCM 1202N. Global Theatre and Performance: Paleolithic to the Threshold of Modernity (TAPS 1230).
Interested students must register for TAPS 1230.

Fall MCM1202N S01 16999 Arranged "To Be Arranged"

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 focus on 1920s and 1960s-70s, but not “rescue” cinema, we will instead explore how “the cinema” has been adopted and dismantled by the logics of neoliberal governmentality, and what it can still offer for modes of political resistance.

Work by filmmakers such as Eisenstein, Vertov, Brecht, Ivens, 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 1203S. New Waves from Paris to Hollywood (FREN 1150G).
Interested students must register for FREN 1150G.

Fall MCM1203S S01 16998 Arranged "To Be Arranged"

MCM 1203U. East Asian Cinemas in a Global Frame.
Arguably, cinema has political value because it manipulates the texture of our collective imaginations, shaping how the world, races, nations and regions appear before globally differentiated audiences. By analyzing films from Hollywood, the PRC, Japan, Korea, Hong Kong and Taiwan, this course charts how “East Asia” emerged cinematically as a textured cultural and geopolitical entity within the framework of a broader global circulation of images. Topics covered include Hollywood Orientalisms, Japanese Empire, postsocialist China, and New Korean Cinema. DPLL

Fall MCM1203U S01 17471 TTh 9:00-10:20(08) (T. Chen)

MCM 1203W. Social Media Networks: From Local to Global.
Social media networks have played an increasingly conspicuous role in national and transnational politics, from the Arab Spring uprisings, to the 2013 Gezi Park demonstrations in Turkey, to the viral spread of fake news leading up to the 2016 US election. In this course, we will discuss how media connect people across the globe to an unprecedented degree, as well as the stark divisions and borders they reveal, complicating any utopian visions of a “global village.” We will explore how individuals’ networked identities and national and global scales of social media communities are mutually constituted.

Fall MCM1203W S01 17526 Th 6:40-8:00PM(05) "To Be Arranged"
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 student and media cultures 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 1504G. Chinese Women, Gender, and Feminism from Historical and Transnational Perspectives (East 1950B).
Interested students must register for East 1950B.
Spr MCM1504G S01 25811 Arranged "To Be Arranged"

Interested students must register for ITAL 1340.
Spr MCM1504H S01 25655 Arranged "To Be Arranged"

MCM 1504I. Image, Music, Text (ENG 1762C).
Interested students must register for ENG 1762C.
Fall MCM1504I S01 17006 Arranged "To Be Arranged"

MCM 1504Q. Reading Narrative Theory (ENG 1950G).
Interested students must register for ENG 1950G.
Fall MCM1504Q S01 17008 Arranged "To Be Arranged"

MCM 1504R. Iranian Cinema.
The emergence in the 1990s 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 Islamicization of the culture, the institutionalization of the "modesty system," and the alteration of divorce laws. DLL
Fall MCM1504R S01 16205 T 1:20-3:50(03) (J. Copjec)

MCM 1505C. Cinema's Bodies (GNSS 1721).
Interested students must register for GNSS 1721.
Fall MCM1505C S01 17001 Arranged "To Be Arranged"

Interested students must register for HMAN 1972X.
Fall MCM1505H S01 16997 Arranged "To Be Arranged"

MCM 1505I. Writing and the Ruins of the Empire (ENG 1561D).
Interested students must register for ENG 1561D.
Fall MCM1505I S01 17007 Arranged "To Be Arranged"

MCM 1505K. Blackness and the Cinematic.
This course equips students to think creatively and well about what might be encountered under the categories of “Blackness” and “cinematic reality” even as it aims to expose students to how “Blackness” and “legibility” have been thought in selected recent scholarly and expressive works. Our emphasis will be on Black diasporic audio-visual culture. We will consider scholarship in the cinema and media studies, performance studies, art history, and visual studies. Though most of the material we will consider was published recently, we will strive to understand the ideas and expressions that have created the fundamant for our present concerns.
DPLL
Fall MCM1505K S01 17524 Th 1:00-3:30 (K. Keeling)

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(14) (A. Cokes)

MCM 1700Y. Expanded Storytelling: Capture, Share and Expose.
How can we shoot a documentary inside an online videogame? How can we transform a historical archive into a dynamic narrative platform? How can we tell a story together with hundreds of other people? How can we create portraits with data retrieved from the Internet/mobile companies about ourselves? In this production course we will explore how emerging technologies and new habits of image making/sharing are challenging traditional forms of storytelling. In particular, we will focus on collaborative authorship, citizen journalism, fictional online persona creation, big data, and digital archives editing. Includes screenings, readings, technical-workshops (video/lighting/editing/coding), assignments, and a final project.
Spr MCM1700Y S01 26209 T 9:00-11:50 "To Be Arranged"

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(11) (L. Thompson)

MCM 1701E. Experimental Narrative.
With film well into its 2nd century, a large body of work has emerged that plays with, around, and against conventions of classical cinema. Specifically, what we understand to be traditional narrative structures, such as drama, documentary, and action films. In fact, experimental narrative now has some of its own genres, which are to be found in both mainstream and fringe media. The goal of this class is to investigate some of these forms of experimental narrative. It is predicated on a basic understanding of narrative conventions, and designed to encourage students to make work that challenges those conventions.
Fall MCM1701E S01 17027 W 2:00-4:50(17) (J. Montgomery)

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 1990. 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).
Deleuze and cinema. Work that influenced Deleuze as well as from the secondary literature on a sustained study of Deleuze's cinema book. We will read selections from

This seminar is devoted to reading Gilles Deleuze's two volume work. The aim of the course is to enhance a broader understanding of the connection. At the same time, it is in the center of many artistic contexts. Collaboration is a form of relation that may be idyllic 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.

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 geopolitical contexts. Collaboration is a form of relation that may be idyllic 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.

MCM 2100T. Caring for the Truth (HMAN 2971D).
Interested students must register for HMAN 2971D.

MCM 2110P. Genres of Critique (ENGL 2901H).
Interested students must register for ENGL 2901H.

MCM 2110Q. Ultimate Dialogicality: Thinking With Bakhtin (ENGL 2901G).
Interested students must register for ENGL 2901G.

MCM 2120J. Realism - Concepts, Forms and Styles.
The course focuses on the notion of realism as a general concept. Realism is a philosophical concept that defines the relationship between the external world and the subject and the media involved establishing this connection. At the same time, it is in the center of many artistic styles with many aesthetic and political consequences (cp. Italian neo-realism) Bringing this two dimensions together opens the field of attention to the borders between fact and fiction, fiction and documentary etc. The aim of the course is to enhance a broader understanding of the notion by exemplifying the problem. Enrollment limited to 12. This course is for Graduates only. Upperclass undergraduates require instructor's permission.

MCM 2120K. Deleuze and Cinema.
This seminar is devoted to reading Gilles Deleuze's two volume work on cinema, Cinema 1: The Movement-Image, and Cinema 2: The Time-Image, and assessing its impact on and continuing relevance to the study of film and culture. We will screen selected films of significance to Deleuze's own study of cinema, as well as a few not referenced by him that nonetheless might prove relevant to or provocative in the context of a sustained study of Deleuze's cinema book. We will read selections from work that influenced Deleuze as well as from the secondary literature on Deleuze and cinema.

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. Upperclass undergraduates require instructor's permission.

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

MUSC 0021J. Stephen Sondheim and the American Musical.
This seminar considers the theater shows of Stephen Sondheim in relation to the history of the American musical. Through close study of selected scenes and shows, we examine how and why Sondheim and his collaborators "reinvented" the genre. Special emphasis will be given to Sondheim's critical skepticism concerning the myths, characters, and ethos of social optimism that have been central to the Broadway tradition. We examine links between the shows and post-WWII historical contexts, and consider the political implications of the circumscribed social universe—predominantly white, urban, and affluent—within which most of his shows take place. FYS
MUSC 0033. From the Blues to Beyoncé: Rock, A Portrait of America. This course seeks to view American cultural and social history of the last century through the lens of rock music. We will investigate the history of rock and popular music from its roots in the early twentieth-century to the present. We will examine the social, cultural and political contexts that gave birth to the various genres of rock music by exploring the music through the lenses of race, class, gender, advances in technology, and developments in the music business. No musical background is required. Spr MUSC033 S01 25456 TTh 1:00-2:20(10) (E. Nathan)

MUSC 0066. The Guitar: Sound, Society, and Six String Studies. This course treats the guitar as a point of entry into key sonic, social, and technical developments that have shaped music-making around the world over the last two centuries. Through reading, viewing, and listening assignments, we will study topics such as the craft of guitar making; its ecological relation to natural and synthetic materials; the sheer variety of guitar traditions that have emerged in Europe, North America, Latin America, and Africa; the meaning of virtual and video game guitars; and the instrument’s ever-shifting ties to race, class, gender, and sexuality. FYS WRIT Spr MUSC066 S01 25861 W 3:00-5:30(14) (C. Tucker)

MUSC 0200. Computers and Music. Examine the history, literature, production and theory of music technology. Track development of musical inventions and their impact on musical thought, production and culture. Develop theoretical and practical knowledge of computer music based on first-hand experience in the Multimedia Lab, using computer music software and hardware to complete creative assignments. Gain an appreciation for the pioneering work done in previous decades, both in research and composition. Become familiar with the literature of electronic music and learn about the impact of technology on popular and experimental genres. Permission granted based on questionnaire given in first class. Preference given to lower-level students. Fall MUSC0200 S01 16533 TTh 10:30-11:50(13) (T. Winkler)

MUSC 0220. Electroacoustic Improv Ensemble. An ensemble devoted to free improvisation with new media. Experimental approaches to sound and focused listening techniques are explored with acoustic instruments, live electronics, real-time video, together with networked improvisation, and more. Enrollment limited to 12 students; by audition. Fall MUSC0220 S01 16770 W 7:00-9:50PM(02) "To Be Arranged"

MUSC 0221. MEME Ensemble: Tactile Media Workshop. Critical and experimental approaches to hardware technologies in sound and image production. Focus on technology considered “behind” our media, its history, mechanics, and how we might engage with it expressively, including standard microphones, contact mics, speakers, transducers, tape reels, cassette tape, turntables, handmade 16mm film and manual projection techniques. Hands-on experience in how to build compositions, installations, & performance systems. Covers improvisation, collaboration, attentive listening, and audiovisual composition concepts. No previous coursework or experience with experimental media production required, however open engagement to the subject matter necessary. Enrollment limit 12. Instructor permission required. Interested students must attend first class. Spr MUSC0221 S01 25511 W 7:00-9:50PM(08) "To Be Arranged"

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 harmony, analysis, and composition. Ear-training and sight-singing are included. For students with some musical training. Enrollment limited to 40. Fall MUSC0400 S01 16776 MWF 11:00-11:50(16) (L. Jiorle-Nagy) Fall MUSC0400 S02 17311 MWF 10:00-10:50(14) (L. Jiorle-Nagy) Spr MUSC0400 S01 25492 MWF 11:00-11:50(04) (L. Jiorle-Nagy)

MUSC 0550. Theory of Tonal 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 TTh 10:30-11:50(13) (E. Nathan) Fall MUSC0550 S02 16529 TTh 1:00-2:20(10) (M. Steinbach)

MUSC 0560. Theory of Tonal Music. See Theory Of Tonal Music (MUSC 0550) for course description. Prerequisite: MUSC 0550 or permission of the instructor. Spr MUSC0560 S01 25460 TTh 1:00-2:20(10) (L. Wang) Spr MUSC0560 S02 25484 TTh 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 TTh 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 6:30-9:30PM(02) (L. Jody)

MUSC 0601. Chorus. See Chorus (MUSC 0600) for course description. Spr MUSC0601 S01 25512 MW 6:30-9:30PM(08) (L. Jody)

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(02) (B. Brown)

MUSC 0611. Orchestra. See Orchestra (MUSC 0610) for course description. Spr MUSC0611 S01 25513 TTh 7:15-9:45PM(18) (B. Brown)

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(02) (M. McGarrall) Fall MUSC0620 S01 16776 M 6:00-7:20PM(02) (M. McGarrall)

MUSC 0621. Wind Symphony. See Wind Symphony (MUSC 0620) for course description. Spr MUSC0621 S01 25514 W 6:00-8:20PM(08) (M. McGarrall) Spr MUSC0621 S01 25514 M 6:00-7:20PM(08) (M. McGarrall)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MUSC 0630. Jazz Band.
Half credit each semester. A practical study of jazz from the 1920s to the present through coaching, rehearsals, and performance. 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(15) (M. McGarrell)
Fall MUSC0630 S01 16778 M 7:30-8:50PM(15) (M. McGarrell)
Fall MUSC0630 S02 16779 T 8:00PM-9:20PM(04) (M. McGarrell)
Fall MUSC0630 S03 16780 W 2:00-3:20(07) (M. McGarrell)
Fall MUSC0630 S04 16781 W 4:00-5:20(17) (M. McGarrell)
Fall MUSC0630 S05 16782 F 4:00-5:20(11) (M. McGarrell)

MUSC 0631. Jazz Band.
See Jazz Band (MUSC 0630) for course description.
Spr MUSC0631 S01 25730 Th 6:10-7:20(13) (M. McGarrell)
Spr MUSC0631 S01 25730 M 7:30-8:50PM(13) (M. McGarrell)
Spr MUSC0631 S02 25733 T 8:00PM-9:20PM(13) (M. McGarrell)
Spr MUSC0631 S03 25734 W 2:00-3:20(13) (M. McGarrell)
Spr MUSC0631 S04 25735 W 4:00-5:20(13) (M. McGarrell)
Spr MUSC0631 S05 25736 F 4:00-5:20(13) (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(17) (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(13) (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, gyl, 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, salsa, 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, Ghanab, and Milan Nascimento. DPLL
Fall MUSC0642 S01 16787 M 7:00-9:00PM(02) (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 may participate on instructor approval. Enrollment limit 20.
Fall MUSC0645 S01 16560 M 5:30-7:00(15) (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 may participate on instructor approval. Enrollment limit 20.
Spr MUSC0646 S01 25470 M 5:30-6:50(13) (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(09) (M. Perlman)

MUSC 0651. Javanese Gamelan.
See Javanese Gamelan, MUSC0650, for course description. Enrollment limited to 18 students.
Spr MUSC0651 S01 25725 T 6:00-8:50PM(16) ’To Be Arranged”

MUSC 0670. Old-Time String Band.
Half credit 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(05) (S. Astrausky)

MUSC 0671. Old-Time String Band.
See Old-Time String Band (MUSC 0670) for course description. Enrollment limited to 20 students.
Spr MUSC0671 S01 25720 T 7:00-8:50PM(18) (S. Astrausky)

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 (L. Finkel)

MUSC 0681. Chamber Music Performance.
See Chamber Music Performance (MUSC 0680) for course description.
Spr MUSC0681 S01 25717 Arranged (L. Finkel)

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.

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 25184 Th 9:00-10:20(01) (L. Jodry)

A history of European and American art music from Beethoven to the Postmodernists. Prerequisite: MUSC 0550 or permission of instructor.
Fall MUSC0930 S01 17522 Th 2:30-3:50(03) ’To Be Arranged”
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) (A. Cole)

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 W 3:00-5:30(14) (M. Steinbach)

MUSC 1040. Analysis of Romantic Musics.
This is an analysis course focusing on music of 19th -century Western concert tradition. The primary goal is to improve and introduce new analysis skills related to chromatic harmony and form. The course proceeds by distinctive genres, including examples of solo piano works, lieder, string quartets and other chamber works, symphonies, tone poems, and opera. Though the emphasis is primarily on analyzing purely musical elements, we will also touch on broader issues of Romantic aesthetics and cultural contexts, such as fragmentation, virtuosity, nostalgia, and the debate over absolute and programmatic music.
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 manuscripting 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 notated 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 1120. 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 quartet, 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 MUSC1120 S01 25222 W 3:00-6:30(14) (L. Wang)

Seminar in Electronic Music is a study of music employing electronic media, including real-time digital signal processing, multimedia, and live performance. Technical aspects of the course focus on programming using Max/MSP to create interactive projects and algorithmic compositions. Permission of instructor required. Interested students must come to the first class. Preference will be given to students who have completed MUSC 0200.
Fall MUSC1210 S01 16541 TTh 1:00-2:20(10) (J. Rovan)

MUSC 1240L. Building Musical Instruments.
In Building Musical Instruments, we will study and create expressive musical sound by building acoustic, analog, and digital instruments. Using sonic goals as inspiration for design features, we will build handheld acoustic instruments, contact microphones, basic synthesizers, and digital controllers, and we will consider the ways in which these distinct objects can work together to form a musical performance system. Topics include: musical listening and design, resonance of different materials, soldering, breadboarding, reading a basic schematic diagram, creating an enclosure, and expressive interaction with instruments. No prerequisites. Maximum enrollment: 12.
Fall MUSC1240L S01 17573 TTh 10:30-11:50 (K. Warren)

Brown University
MUSC 1701. Orchestral Conducting.
We will discuss, study and practice various technical approaches to conducting through the examination of standard repertoire. Students will develop skills in score reading and analysis. This course will provide a supportive workshop environment. Students will be given the opportunity to conduct an in class ensemble. Repertoire will small to large symphonic works from Händel through Stravinsky, depending upon the needs of each student and over all class level. Pre-Requisites: MUSC 0550-0560. Audition on the first day of class with Händel's Messiah Overture. Students will play for their colleagues. Prior knowledge of orchestration and instrumentation is helpful. Knowledge of transposition and C clefs is helpful. If you have placed out of music theory at Brown or have questions, please contact the instructor at: brandon_brown@brown.edu
Fall MUSC1701 S01 17569 T 4:00-6:30(09) (B. Brown)

MUSC 1810. Applied Music Program: Instruction in Vocal or Instrumental Music
Half credit each semester. Restricted to skilled musicians. Restricted to skilled musicians demonstrating mastery of 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 is charged for enrollment. 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 1923. Music in the Andean Countries: From Cumbia to Carnavalito.
This course provides an introduction to the music of South America’s Andean countries. Through texts, listenings, and hands-on instruction, students will explore the social histories and stylistic principles of genres like Colombian and Peruvian cumbia, Afro-Peruvian festejo and lando, Chilean nueva canción, and the sikuri and huayno music of South Andean Quechua and Aymara peoples. Class sessions balance cultural analysis with opportunities to play, and students are expected to develop some facility with key songs and rhythms. No experience is necessary, though inexperienced musicians can expect to focus on instrumental or vocal parts that present a lower bar to participation.
Fall MUSC1923 S01 17105 TTh 10:30-11:50(13) (C. Tucker)

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 ethnocritical 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(02) (M. Obeng)

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.
Spr MUSC1961 S01 25726 W 7:30-9:50PM(08) (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.

This seminar investigates digital media practices at the intersection of virtual and embodied experience, exploring overlapping genres of play, performance, pedagogy, and participatory culture. Topics include digital games, viral videos, online music and dance lessons, and the performative aspects of virtual communities. Theoretical approaches draw on scholarship in media ethnography, performance studies, human-computer interaction studies, gender studies, and ethnomusicology. We will give equal attention to production, circulation, and reception practices, and consider their contemporary convergence. The course requires critical engagement with a diverse range of media, genres, and cultural contexts, and encourages students to examine their own media practices.

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 2080B. Ethnography of Popular Music.
This seminar explores ethnohistorical 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 ethnohistorical 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 from the fragments left by decolonization; and the nation's fate after globalization.
Spr MUSC2080D S01 25224 M 3:00-5:30(17) (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 16558 W 2:00-6:00(17) (T. Winkler)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MUSC 2220. Designing and Playing Alternative Controllers. 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 MaxMSP or other real-time programming required. Permission of instructor required.

MUSC 2235. Timbre in Electroacoustic Music. We will investigate the seminar topic of timbre in electroacoustic music though both analysis and composition. We will study musical compositions in various media (acoustic and electronic) that use timbre in various ways, scholarly writing that looks in more depth at compositional processes involving timbre (such as in Spectral music), and various software programs that can assist in analysis and composition. Students will compose new works for electronics alone, as well as for guest solo performers with interactive electronics to be performed in a public concert. Enrollment limited to 8. Permission required for undergraduates.

Fall MUSC2235 S01 17146 Th 4:00-6:30(04) (E. Nathan)

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. Winker)

MUSC 2300A. Critical Improvisation Studies. Advanced seminar exploring improvisation from various perspectives: historical, anthropological, philosophical, ethical, and creative. We study improvisation in diverse musical traditions, in other arts, and in problem-solving contexts such as business, technology, and games. Discussion topics include individual vs. group improvisation, the status of "freedom" in creative processes, and the social and artistic functions of improvisation. Instructor permission required.

Fall MUSC2300/S01 16549 M 3:00-5:30(15) (D. Gooley)

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"

MUSC 2990. Thesis Preparation.

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 15422 Th 1:00-2:20(10) (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

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 Th 1:00-2:20(10) (P. Guyer)

PHIL 0110. The Nature of Fiction. The 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?

Spr PHIL0110 S01 24358 Th 9:00-10:20(01) (A. Bujman Pautz)

PHIL 0260. Philosophy of Social Science. This is a general introduction to the philosophy of social science. Social science brings with it certain specific problems and modes of explanation. This course is designed to introduce students to some of the issues surrounding social science. What sorts of problems and phenomena are social scientists concerned with explaining? How are they different from the problems tackled by natural scientists? Is there a mode of explanation distinctive of social science? What sorts of theoretical tools do social scientists use? We'll consider all these questions, and more.

Fall PHIL0260 S01 17508 Th 9:00-10:20(08) (K. Sankaran)

PHIL 0300G. Introduction to the Philosophy of Wittgenstein. This course examines Wittgenstein's two groundbreaking works, the Tractatus Logico-Philosophicus (1921) and the Philosophical Investigations (1953), both of which reshaped 20th-century thought. What are the limits of language? What is the nature of philosophy? Can there be such a thing as a private language? Wittgenstein addresses these and other questions in both works. His answers are at times cryptic, such as when he says "The limits of language mean the limits of my world". The primary goal of this course is to come to grips with the main claims of both works and the development of Wittgenstein's thought.

Fall PHIL0300G S01 17566 MWF 12:00-12:50(12) (T. Moore)

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. WRIT

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. WRIT

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 issues of justice, particularly in the context of large-scale harms, such as immigration, climate change, poverty, colonialism, secession, intervention, and war.

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. WRIT

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 predication. Argumentation and reasoning may also be addressed at times. No previous experience with logic or philosophy is required.

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.

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. WRIT

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

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.

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 P, 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.

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.

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.

PHIL 0991M. Mental Representation.
Discussion of contemporary philosophical and scientific work on intentionality and mental representation. Topics will include: types of mental representation (language of thought, spoken language, perceptual states, images, cognitive maps, trees, object files, etc.), relations between mental representations and the world (reference, informational semantics, teleological semantics), the nature of perceptual content, the differences between perceptual representation and conceptually grounded representation, philosophical theories of concepts, psychological theories of concepts, theories of belief, ethological work on animal beliefs and concepts, and the nature of conscious thought (particularly, evidence pro and con the theory that thought consists of auditory imagery and artifactual imagery).

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

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, inattentional blindness, hemineglect, and related phenomena; (ix) the unconscious; and (x) what it is for a state of consciousness to be unified.

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
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 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 TTh 10:30-11:50(13) (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 1890G. Sartre.
The course will focus on Sartre's Being and Nothingness, one of the great works of twentieth-century philosophy. Attention will also be given to some of his literary texts (Nausea, No Exit) that complement this work. Spr PHIL1890G S01 25894 W 3:00-5:30(14) (C. Larmore)

PHIL 1900. Independent Studies.
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. PHIL 1995. Senior Thesis.
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 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 unrealist 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 Th 2:00-5:00(03) (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 2080J. Kant and Mendelssohn.
An examination of the intimately intertwined intellectual careers of Immanuel Kant and Moses Mendelssohn. Topics will include their approaches to philosophy; their metaphysics, including attitudes towards proofs of the existence of God and immortality; their aesthetics; and their positions on religion and religious liberty. Readings from a wide range of sources, including Mendelssohn's Philosophical Writings, Jerusalem, and Morning Hours, and Kant's Critiques, Religion within the Boundaries of Mere Reason, and Metaphysics of Morals. Spr PHIL2080J S01 25895 W 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(08) (J. Broackes)

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 T 6:40-8:10PM(05) (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 24368 T 4:00-6:30(16) 'To Be Arranged'

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 Th 9:00-10:20(08) (J. Broackes) Spr PHIL2200 S01 24357 Th 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 MWF 9:00-9:50(02) (A. Pautz)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHIL 2800. Dissertation Workshop.  
No description available. Course for graduate students during their 4th year or above.  
Fall PHIL2800 S01 15457 MWF 9:00-9:50(01)  (J. Schechter)  
Spr PHIL2800 S01 24360 MWF 10:00-10:50(14)  (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 for 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.  
Fall 2017  
There are many courses that look at philosophers or philosophical questions in other departments, including Africana Studies, Classics, Cognitive and Linguistic Sciences, French Studies, German Studies, Judaic Studies, Mathematics, Modern Culture and Media, Political Science, and Religious Studies. They include:  
Classics  
CLAS 1140 Classical Philosophy of India

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 0040, 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 0900 or MATH 0100.  
Fall PHYS0030 S01 15173 MWF 11:00-11:50(04)  (G. Landsberg)  
Fall PHYS0030 S02 15174 MWF 12:00-12:50(04)  (G. Landsberg)

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, 0060. Employs the concepts of elementary calculus but little of its technique. Lectures, conferences, and laboratory. Six hours of attendance. Recommended: MATH 0900 or MATH 0100.  
Spr PHYS0040 S01 24165 MWF 11:00-11:50(16)  (R. Gaitskell)  
Spr PHYS0040 S02 24166 MWF 12:00-12:50(16)  (R. Gaitskell)

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 0900 or MATH 0100.  
Fall PHYS0050 S01 15179 MW 8:30-9:50(01)  (M. Dorca)

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)  (M. Dorca)

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. S/NC  
Fall PHYS0070 S01 15180 MWF 9:00-9:50(01)  (J. Valles)

Physics has had a dramatic impact on our conception of the universe, our ideas concerning the nature of knowledge, and our view of ourselves. Philosophy, sometimes inspired by developments in physics, considers the impact of such developments on our lives. In this seminar, students will explore how classical and modern physical theory have affected our view of the cosmos, of ourselves as human beings, as well as our view of the relation of mathematical or physical structures to ‘truth’ or ‘reality.’ Through a study of physics as well as selected philosophical readings, we will consider how we can know anything, from seemingly simple facts to whether a machine is conscious. Enrollment limited to 20 first year students. Instructor permission required. FYS WRIT  
Fall PHYS0100 S01 17360 TTh 2:30-3:50(03)  (S. Gates)

PHYS 0150. The Jazz of Modern Physics.  
This course, aimed at both students in the humanities and sciences, will explore the myriad surprising ways that jazz music is connected to modern physics. No background in physics, mathematics or music is required, as all of these foundational concepts and tools will be introduced. The Jazz of Physics has three interconnected components:  
(1) Using concepts and analogies from music and acoustics to explore the key conceptual ideas in modern physics such as quantum mechanics/ information, general relativity, particle physics, dark energy and big bang cosmology.  
(2) Exploring the parallels between jazz and physics through the lens of 20th century physics and jazz history, as well as key innovations in both fields with an eye towards future innovations.  
(3) Students will learn the tools of signification in physics and develop group projects with a final product.  
The course will consist of lectures, related homework sets, weekly discussion meetings, and a final study where groups of students will select a topic of interest.  
Fall PHYS0150 S01 17171 Th 4:00-6:30(04)  (S. Alexander)

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.  
Fall PHYS0160 S01 24168 MWF 9:00-9:50(02)  (C. Tan)

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 Th 10:30-11:50(09)  (J. Pober)

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 Th 1:00-2:20(10)  (D. Cutts)

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

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) (D. Feldman)

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) (D. Stein)

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). Pre-requisites: PHYS 0060 or 0160, MATH 0180, 0200 or 0350, or consent of the instructor.
Fall PHYS0720 S02 17274 MWF 11:00-11:50(16) (C. Tan)

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) (X. Ling)

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) (G. Landsberg)

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) (S. Koushiappas)

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 understanding 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) (L. Dell’Antonio)

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) (J. Fan)

PHYS 1420. Quantum Mechanics B.
See Quantum Mechanics A. (PHYS 1410) for course description.
Spr PHYS1420 S01 24174 MWF 9:00-9:50(02) (S. Ying)

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) (J. Pober)

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) (V. Mitrovic)

PHYS 1560. Modern Physics Laboratory.
A sequence of intensive, advanced experiments often introducing sophisticated techniques. Prerequisites: PHYS 0470, 0500 and 0560; and MATH 0250, 0540 or PHYS 0720; or approved equivalents. WRIT.
Spr PHYS1560 S01 24175 MWF 9:00-10:20(01) (K. Plumb)

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 MV 8:30-9:50(02) (K. Plumb)

PHYS 1610. Biological Physics.
Introduction on structures of proteins, nucleotides, and membranes; electrosstatics 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.
Spr PHYS1610 S01 25884 TTh 2:30-3:50(11) (J. Tang)

Designed for undergraduates to participate, individually or in small groups, in research projects mentored by the physics faculty. Students must have taken one year of college level physics. An average of 8 to 10 hours per week of guided research is required as are weekly meetings with the supervising faculty member. Students should consult with faculty to find a mutually agreeable research project and obtain permission to enroll. Section number varies by instructor (students must register for the appropriate section).

PHYS 1990. 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) (R. Gaitskell)
Spr PHYS2010 S01 24177 W 3:00-5:30(14) (V. Mitrovic)

PHYS 2030. Classical Theoretical Physics I.
No description available.
Fall PHYS2030 S01 15191 TTh 9:00-10:20(08) (T. Powers)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHYS 2040. Classical Theoretical Physics II.
No description available.
Spr PHYS2040 S01 24178 TTh 10:30-11:50(09) (J. Fan)

PHYS 2050. Quantum Mechanics.
No description available.
Fall PHYS2050 S01 15192 MWF 10:00-10:50(14) (D. Feldman)

PHYS 2060. Quantum Mechanics.
No description available.
Spr PHYS2060 S01 24179 MWF 10:00-10:50(03) (R. Pelcovits)

PHYS 2070. Advanced Quantum Mechanics.
No description available.
Fall PHYS2070 S01 15193 TTh 1:00-2:20(10) (A. Jevicki)

PHYS 2100. General Relativity and Cosmology.
Given every other year.
Spr PHYS2100 S01 24180 TTh 1:00-2:20(10) (D. Lowe)

PHYS 2140. Statistical Mechanics.
No description available.
Spr PHYS2140 S01 24181 TTh 1:00-2:20(10) (J. Kosterlitz)

PHYS 2300. Quantum Theory of Fields I.
No description available.
Spr PHYS2300 S01 24182 TTh 9:00-10:20(01) (A. Jevicki)

PHYS 2320. Quantum Theory of Fields II.
No description available. Instructor permission required.
Fall PHYS2320 S01 15194 TTh 10:30-11:50(13) (D. Lowe)

PHYS 2410. Solid State Physics I.
No description available.
Fall PHYS2410 S01 15195 MWF 12:00-12:50(12) (R. Pelcovits)

PHYS 2430. Quantum Many Body Theory.
No description available.
Fall PHYS2430 S01 15196 MWF 2:00-2:50(07) (J. Kosterlitz)

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++.
Spr PHYS2600 S01 24184 MW 8:30-9:50(02) (K. Plumb)

PHYS 2630. 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.
Spr PHYS2630 S01 25885 TTh 2:30-3:50(11) (J. Tang)

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.
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 Th 4:00-6:30(04) (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 POLS0820US01 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 1015. Politics and Nature. Examines the relationship between human beings and the earth as it has been conceived in the tradition of Western political thought from the ancient Greeks to the present day. The first part of the course draws from the history of political thought to understand the background against which our contemporary environmental problems have evolved and the conceptual resources that current theory draws from. The second part of the course investigates environmental political theory at the cutting edge today, engaging a wide range of perspectives and methods in the field. Spr POLS1015 S01 25613 TTh 9:00-10:20(01) (S. Krause)

POLS 1020. Politics of the Illicit Global Economy. This course is about the "underside" 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 1085. Injustices. How should we respond to injustice? Violently or non-violently? Lawfully or disobediently? Should we always try legal channels first or are some injustices too severe and urgent? When do we have an obligation to join those already resisting injustices? History presents us with an enormous repertoire of ways people have resisted injustice: conscientious refusal, passive resistance, non-violent direct action, sabotage, civil disobedience, strikes, mass protests, and revolution. This course will read works of political philosophy next to signature events of our own time, such as Arab Spring, Black Lives Matter Movement, the Tea Party, and labor strikes, to discuss the above questions. Fall POLS1085 S01 16913 TTh 1:00-2:20(10) (A. Gourévitch)

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 TTh 9:00-10:20(01) (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 MWF 1:00-1:50(06) (J. Tomasi)

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 1220. Russia and Post-Soviet States. After a decade of political stability and economic growth Russia faces multiple challenges: declining prices for its energy exports, an unresolved conflict in Ukraine, growing authoritarianism, and autumn 2016 legislative elections that raise the prospect of renewed urban political protests. POLS1220 looks at the sources of the current situation in the institutional, political-economic, and social trajectories of recent years. Topics include the rise of Putin and other presidentialist regimes; growth and repression of civil society; welfare; re-democratization movements. Particular attention is given to the question whether post-Soviet electoral-authoritarian regimes can stabilize. Focus is on Russia with comparisons to other cases Spr POLS1220 S01 25967 TTh 2:30-3:50 (L. Cook)

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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POLS 1280. Politics, Economy and Society in India
This course will concentrate on three aspects of the "Indian experience": democracy, ethnic and religious diversity, and political economy. With a brief exception, India has continued to be democratic since 1947. No developing country matches India's democratic record. Second, remarkable cultural, ethnic and religious diversity marks India's social landscape, and influences its politics. Third, India's economy has of late been going through a serious economic transformation, drawing comparisons with China. Is the comparison valid?
Spr POLS1280 S01 25607 TTh 2:30-3:50(11) (A. Varshney)

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 1325. Political Organizations and Social Change in America
Will examine efforts to create significant policy change in contemporary political and social life in the United States. We examine strategies of social change; explore the characteristics of advocacy organizations; and consider how organizations can expand their political toolkits as they seek to create social change. In addition, we will examine the relationship between organizations, members, and activists. Why do so many organizations lack active members? What does it take to turn members into activists? Among the cases we examine are the Civil Rights Movement, the Tea Party, Alinsky organizations, Black Lives Matter, the Koch Brothers Network, Dreamers, and organized labor.
Fall POLS1325 S01 16885 MWF 11:00-11:50(16) (M. Weir)

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, religiously, political orientation, and cultural beliefs or stereotypes influence women's public policy and social beliefs. 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 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 MW 8:30-9:50(01) (M. Bryth)

POLS 1440. Security, Governance and Development in Africa.
Some of the fastest-growing economies in the world now lie in sub-Saharan Africa. Yet Africa is also home to some of the world's most corrupt and violent states. This course will provide a variety of lenses through which to view these and other paradoxes on the continent, with a focus on security, governance and economic development. Topics will include the long-term consequences of colonialism and the slave trade; the politics of independence; the causes and effects of crime, violence and civil war; democracy and democratization; the promise and pitfalls of foreign aid; and the challenges of building strong, stable states.
Fall POLS1440 S01 17237 TTh 9:00-10:20(06) (R. Blair)

POLS 1465. Analytical Foundations of Political Economy.
This class provides an introduction to topics in political economy with a focus on using basic models to understand both individuals and groups facing a variety of social dilemmas. Simple formal models will provide a framework for understanding problems in politics and political economy, including the collective action problem, prisoner's dilemma, coordination problems, and more generally the importance of formal and informal institutions in guiding social outcomes. The class surveys major thinkers in political economy and uses their ideas to understand major changes in society, markets, and states from an historical perspective.
Fall POLS1465 S01 17408 TTh 2:30-3:50(03) (D. Skarbek)

POLS 1500. The International Law and Politics of Human Rights
Introduces students to the law and politics of international human rights; examines the construction of an international human rights regime and its influence on international politics. Will survey the actors and organizations involved in the promotion of human rights around the globe, as well as the obstacles. Will review competing conceptions of human rights, whether human rights are universal, problems of enforcement, and the role of human rights in foreign policy. Major topics include civil and political rights; economic, social and cultural rights; genocide, torture, women's rights, humanitarian intervention, and the international criminal court. POLS 0400 strongly encouraged as a prerequisite.
Spr POLS1500 S01 24436 TTh 10:30-11:50(09) (N. Tannenwald)

POLS 1560. American Foreign Policy
This course provides an overview of American Foreign Policy since World War I. The emphasis will be on defense and security policy, and not on foreign economic policy. This course covers significant historical events and personalities over the course of the twentieth century. When events dictate, part of any given daily class may be devoted to current events in American Foreign Policy, with emphasis on their historical source and context. Prerequisite: POLS 0400.
Fall POLS1560 S01 15524 TTh 2:30-3:50(03) (R. Demmott)

POLS 1600. Political Research Methods.
Introduction to quantitative research methods in political science. Topics include research design, descriptive statistics, statistical hypothesis testing, and bivariate and multivariate regression. By the end of the course, students will have the requisite skills to intelligently consume and produce basic quantitative social science research. Enrollment limited to 24 sophomore, junior, and senior Political Science, International Relations, or Public Policy concentrators.
Spr POLS1600 S01 25784 TTh 6:40-8:00PM(18) (P. Testa)

Who benefits from international trade, and what are its social and environmental consequences? How can rich nations help poor ones develop, and to what extent should they try? What are the political dimensions of the flow of oil and natural resources? This course is designed to provide students with a broad introduction to the field of international political economy to help address questions like these ones. The course examines the fundamentals of international trade, finance, development, and investment policies. Must have basic understanding of statistics, macroeconomics, and international politics.
Fall POLS1730 S01 15488 MWF 10:00-10:50(14) (J. Colgan)

POLS 1740. Politics of Food.
How do politics and public policy shape the nature of farming and the price of food in the US? What is the extent of hunger and malnutrition in the country, and how to politics and public policy shape the responses to these issues? How well does government regulate the safety and healthfulness of food? This course will draw on a combination of case studies and scholarly work to examine these questions. The significance of globalization will also be considered but the emphasis of the course will be on American politics and policy. The course is not open to first-year students. This course is not capped but TA allocations are made based on pre-enrollment and the course might be closed the first day, depending on the availability of TAs beyond the original allocation.
Spr POLS1740 S01 24384 MWF 1:00-1:50(06) (R. Cheit)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POLS 1820S. Two Liberal Traditions: English and French.

What does it mean to be a liberal? In America, we regularly take our "liberal heritage" for granted, so much so that liberal principles are simply accepted as political necessities, even truisms. Many of these principles come to us from English thinkers like John Locke and John Stuart Mill. Yet theorists in the French tradition offered an equally rich, though distinct perspective on these values. We will consider the "two liberal traditions," Anglo-American and French, to gain a better grasp of liberalism's beginnings and its legacy. Can the study of liberal thought teach us anything about contemporary politics and economics? WRIT

Fall POLS1820S S01 17153 T 4:00-6:30(09) (G. Englel)

POLS 1820T. Race, Crime, and Public Policy.

This course will provide students with an in-depth analysis of the social and political connections between criminal justice policies and race. The first section of the course will cover the concepts of race and ethnicity and the social construction of target populations. Second, students will learn what public policy is, how it is made, and methods of analysis. Next, we will cover the history of the criminal justice system and the creation of mass incarceration. Lastly, we will cover specific criminal justice policies and practices and their ramifications for the civil liberties and rights of racial minorities. WRIT DPLL

Fall POLS1820T S01 16867 Th 4:00-6:30(04) (B. Davis)

POLS 1821. Democratic Erosion.

This course explores the causes and consequences of democratic erosion in comparative and historical perspective. The course will provide an opportunity for students to engage, critically and carefully, with the claims they have doubtlessly already heard about the state of democracy in the US and Europe; to evaluate whether those claims are valid; and, if they are, to consider strategies for combating democratic erosion here and abroad. The course will be taught simultaneously at roughly two dozen universities, with a number of cross-campus collaborative assignments. Interested students should attend the first day of class to apply for admission. WRIT

Fall POLS1821X S01 18554 Th 4:00-6:30(17) (G. Englert)

POLS 1821I. Issues in Democratic Theory.

This seminar engages contemporary issues in democratic theory. Topics explored include the meaning of democracy (and the political consequence of different answers to that question); representation and citizenship; democracy and rights, (free speech, religious freedom, and privacy); democracy and judicial review; deliberative democracy. We will read works of political theory and United States Supreme Court cases. Enrollment limited to 20 juniors and seniors concentrating in Political Science. WRIT

Fall POLS1821I S01 17219 F 3:00-5:30(11) (C. Brettschneider)

POLS 1821J. Rhode Island Government and Politics.

Students participate in an approved internship in Rhode Island State Politics. Students will be expected to work 8-10 hours a week in an office of state government and, at the end of the semester, reflect on what they’ve learned. Enrollment limited to 20. WRIT

Spr POLS1821J S01 24459 F 3:00-5:30(15) "To Be Arranged"

POLS 1821L. International Relations of Russia, Europe and Asia.

What role does Russia seek to play in the contemporary international system? Will NATO hold together as an effective military alliance willing to defend its member states? Are Russia and China convenient allies or antagonists? The seminar will discuss these questions, considering Russia’s evolving relations with the main centers of power in the international system, its efforts to retain control in the former Soviet space, the effectiveness of Western sanctions, effects of Europe’s declining dependence on Russia’s energy exports, and related topics. Some background on the region is useful but not required. WRIT

Spr POLS1821L S01 24419 Th 4:00-6:30(17) (L. Cook)

POLS 1821N. Political Journalism.

Exploration of the development of political reporting and analysis of contemporary public affairs reporting. Will address key elements of the best political journalism, as well as the manner in which political journalism affects public opinion, political attitudes, and campaigns and elections. Enrollment limited to 20 junior and senior Political Science concentrators.

Spr POLS1821N S01 25608 T 4:00-6:30(16) (J. Robbins)

POLS 1822. Congress.

Takes a comprehensive view of the U.S. Congress, its structure, procedures, elections, parties, constituencies and its interactions with the president and the courts. The Constitution establishes the Congress as the first branch and guardian of the nation’s purse strings. This course will examine the strengths and vulnerabilities of the modern Congress with its highly polarized political parties. Requires extensive reading, a detailed paper and active class participation. Students are expected to pay careful attention to current events in the U.S. Congress. Enrollment limited to 20 juniors and seniors in Political Science.

Fall POLS1822C S01 15541 W 3:00-5:30(17) (R. Arenberg)

POLS 1822I. Geopolitics of Oil and Energy.

Oil is the single most valuable commodity traded on global markets. This course is designed to introduce students to the international political economy and security dimensions of oil and energy. The course explores the industry’s many impacts on politics and economics, including: Dutch disease and the resource curse; the relationship between oil, authoritarianism, and civil wars; the role of the rentier state; the influence of oil on international warfare; global energy governance (e.g., OPEC); political differences within OPEC; US energy policy and energy security. The materials focus primarily on the political economy of oil-exporters, especially those in the Middle East. WRIT

Fall POLS1822I S01 15489 M 3:00-5:30(15) (J. Colgan)

POLS 1822U. War and Human Rights.

This seminar will begin by studying the rise and spread of the notion of human rights, examining some of the core debates over human rights, including their enforcement in times of war. It will then turn to the laws of war, focusing especially on the 1949 Geneva Conventions and the challenges posed to the Conventions by the rise of non-state actors wielding significant violence. Topics include child soldiers, war crimes, humanitarian intervention, torture, targeted killings, humanitarianism, and the international justice. Enrollment limited to 20 juniors and seniors concentrating in Political Science or International Relations. WRIT

Spr POLS1822U S01 26782 W 3:00-5:30(14) (N. Tannenwald)

POLS 1822W. Congressional Investigations.

This seminar will explore the role that Congressional investigations have historically played at the intersection of politics, public policy, tension between the executive and legislative branches, law and media, focusing on certain of the seminal Congressional investigations that both reflected and re-shaped the politics of the day. These will include the Pecora investigation into the 1929 stock market crash, the Truman Committee investigation into defense contracting during World War II, the House Un-American Activities Committee, the McCarthy hearings, Watergate, the Iran-Contra hearings and the Senate Permanent Subcommittee on Investigations hearings into the financial services industry. WRIT

Fall POLS1822W S01 16908 Th 4:00-6:30(09) (J. Robbins)

POLS 1822Z. Social Attitudes and their Impact on U.S. Politics.

The course first documents trends and sources of change in social attitudes. It then evaluates the debate between psychological, sociological and political explanations for opposition to social rights policies. We then transition from the policy realm to the impact of ethnic and gender attitudes on electoral politics. In this half of the class we will study how social attitudes have influenced present-day partisan and presidential politics, how parties and politicians use gender and ethnic appeals for electoral gain, how these attitudes affected presidential candidates in a post-social rights United States. Enrollment limited to 20. WRIT

Fall POLS1822Z S01 15536 M 3:00-5:30(15) (K. Tate)

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 reconstructs 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 nationalism's persistence? What are the roots of nationalism's continued imaginative appeal and political potential? WRIT
Fall POLS1823N S01 15654 T 4:00-6:30(09) (T. Neumann)

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 environment, and human rights and justice. WRIT
Fall POLS1823Y S01 15534 W 3:00-5:30(17) (N. Tannenwald)

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 political 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
Fall POLS1824CS 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. 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 1824N. Feminist Theory for a Heated Planet.
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. WRIT
Fall POLS1824NS S01 17270 T 4:00-6:30(09) (C. Braut)
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(08) (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(11) (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(08) (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 F 11:00-1:30(12) (C. Brettschneider)

POLS 2235. Disobedience and Resistance.
Should we obey the laws that states make? Unsurprisingly, there are numerous counter-theories, practices of disobedience: revolution, mass strikes, sabotage, civil disobedience and conscientious objection. Other kinds of resistance – like mass protests, political strikes, and boycotts – hover on the border of disobedience itself. This course begins with a brief examination of theories of political obligation before moving to a discussion of different, concrete examples of disobedience and the political ideas that they produced. We will discuss revolution, mass strikes, and civil disobedience as paradigm cases of the political problems raised by actually existing, illegitimate laws and governments.
Spr POLS2235 S01 25931 Th 10:30-1:00 (A. Gourevitch)

POLS 2255. States, Societies and Development.
This graduate seminar draws on classic and contemporary writings towards understanding how states and societies interact with each other in particular in the realm of development.
Fall POLS2255 S01 17165 W 9:00-11:30(01) (P. Singh)

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 24435 T 9:00-11:30(01) (E. Steinfield)

POLS 2300. Latin American Political Thought.
Latin American political thinkers, who have been tremendously influential in their own region, remain marginal to the canon of Western political thought. This course is an overview of the various traditions in the history of Latin American political thought. It examines the answers Latin American thinkers have given to some of the fundamental preoccupations of political theory from the perspective of the region’s social and political realities. The course will introduce students to figures in Latin American political thought—such as Bartolomé de las Casas, Simón Bolívar, Domingo F. Sarmiento, José Martí, José Vasconcelos, José Carlos Mariátegui, and contemporary Latino political theorists.
Fall POLS2300 S01 17407 W 12:00-2:30(07) (J. Hooker)

POLS 2450. Exchange Scholar Program.
Fall POLS2450 S01 15025 Arranged "To Be Arranged"
Spr POLS2450 S01 24043 Arranged "To Be Arranged"

POLS 2580. 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 POLS2580 S01 15549 T 1:30-4:00(03) (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 2795. 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 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.
Fall POLS2990 S01 15026 Arranged (R. Cheilt)
Spr POLS2990 S01 24044 Arranged "To Be Arranged"

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. Fall POBS0100 S01 15830 MW 2:00-2:50(07) (P. Sobral) Fall POBS0100 S01 15830 TTh 1:00-2:20(07) (P. Sobral)

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 year course; only in exceptional circumstances is credit given for one semester alone. Spring POBS0110 S01 15831 MW 12:00-1:50(12) (P. Sobral) Spring POBS0110 S01 15831 TTh 9:00-10:20(04) (P. Sobral) Spr POBS0110 S01 24655 TTh 12:00-1:50(12) (P. Sobral)

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. Spring POBS0200 S01 24656 MW 2:00-2:50(10) (P. Sobral) Spring POBS0200 S01 24656 TTh 1:00-2:20(10) (P. Sobral)

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 Fall POBS0400 S01 15832 MW 10:00-10:50(14) (N. Parker) Fall POBS0400 S01 15832 TTh 10:30-11:50(14) (N. Parker) Spring POBS0400 S01 24657 MW 10:00-10:50(09) (N. Parker) Spring POBS0400 S01 24657 TTh 10:30-11:50(09) (N. Parker)

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. Fall POBS0610 S01 15833 TTh 1:00-2:20(10) (P. Sobral)

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. DPLL WRIT Spring POBS0620 S01 24659 TTh 2:30-3:50(11) (L. Simas-Almeida)

POBS 0637A. History of Jews in Brazil (HIST 0637A).
Interested students must register for HIST 0637A. Fall POBS0637A S01 15871 Arranged (To Be Arranged)

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? Pirton, Lispector, Sciarla, Rushdie, Salih, Cristina Garcia, V. S. Naipaul and others. Conducted in English. Enrollment limited to 20 first year students. FYF WRIT Fall POBS0810 S02 15859 TTh 9:00-10:20(08) (P. Sobral)

POBS 0850. Comparative Approaches to the Literatures of Brazil and the United States.
Brazil and the United States have much in common: colonial territories, huge natural resources, dynamic economies and multi-ethnic populations. Yet, their histories and cultures are distinctive and unique, as suggested in Virginia Woolf’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, Sciarla, Delillo, Carvalho, and Doctorow. Some attention to music, film and the visual arts. Enrollment limited to 15. Conducted in English. FYF WRIT Fall POBS0850 S01 16523 M 3:00-5:30(15) (L. Valente)

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. FYF WRIT Fall POBS0910 S01 15836 M 3:00-5:30(15) (O. Almeida)

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(03) (P. Sobral)

POBS 1210. Afro-Brazilian 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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 1501C. Interwar Fascisms and the Portuguese Estado Novo (1932-1945).
Focusing on the interwar period and, this course studies the political nature of the Salazar's dictatorship (the so-called Estado Novo, New State) in its various facets: nationalism, political representations, repression, social policy, Church and State relationship. The Portuguese history will be placed within a wider context, privileging transnational connections and comparative approaches. Was the Portuguese regime a fascist one? What are the affinities and distinctiveness in terms of contemporary dictatorships (Fascism, Nazism and Francoism)? To what extent those regimes were connected? Conducted in English.
Fall POBS1501C S01 17478 M 10:00-12:30 (R. Cristovam Cipriano Almeida de Carvalho)

POBS 1501D. Pathways of Brazilian Narrative
The seminar investigates Brazilian narrative from Modernism to the present, at relevant moments from 20th to 21st centuries. Modernism and modernization have dismantled the romantic emphasis on narrative forms and themes as a unitary vision of social and cultural identity. Macunaima (1928), by Mario de Andrade opened to Brazilian literature a new kind of fiction that considers the multiplicity of a hybrid nation process of identification; a new paradigm re-using themes of exile, mobile identities, violence, terrorism, and interaction between the national and the global environments. Conducted in Portuguese, WRIT
Fall POBS1501D S01 17479 Th 2:30-5:00 (L. Helena)

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)iculate 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(01) (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 24668 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 24669 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(05) (O. Almeida)

POBS 2600W. Contemporary Brazilian Women Writers in the Culture of Money: A Literature of Their Own.
This advanced seminar will study, comment and debate seven contemporary Brazilian novels and two collections of short stories written by women during the last thirty years. Some of the main subjects to be addressed are fear, love, loneliness and exclusion that characterize current turning points for women. The literary works stemming from this kind of environment tend to lead to a labyrinth that maps their characters’ and society’s emotional behavior, thereby transforming meaning and redirecting the pathways of aesthetic form, while modifying the conventions that shed light upon the authors’ construction of their stories.
Fall POBS2600W S01 17463 F 10:00-12:30 (L. Helena)

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"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 a thesis.
Fall POBS2990 S01 15024 Arranged "To Be Arranged"
Spr POBS2990 S01 24042 Arranged "To Be Arranged"

Public Health

PHP 0030. Health of Hispaniola.
Two developing countries, Dominican Republic and Haiti, have widely differing health outcomes despite centuries of shared experience on the Caribbean Island of Hispaniola. This course will examine the history, politics, economics, culture, international relations, demography, and geography, as well as epidemiology and health services, to demonstrate that multiple factors, both recent and long-standing, determine the present health of these populations. Enrollment limited to 20 first year students. Instructor permission required. FYS WRIT Spr PHP0030 S01 25999 TTh 6:40-8:00PM(18) (T. Empkie)

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 MW 8:30-9:50(01) (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, though previous programming experience is not required. FYS 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 25496 MWF 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 MWF 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(14) (O. Galarraga)

The course is intended to challenge students from different disciplines to develop strategies to address the challenges of establishing and sustaining HIV/AIDS care and treatment programs in Africa. The course will begin with a general introduction to HIV/AIDS to provide a foundation wherein students will obtain a basic scientific and sociological understanding of the disease. Discussion topics on: the impact of AIDS, introducing antiretroviral therapy in Africa, monitoring and evaluating ARV therapy scale up and developing a country wide plan for a national laboratory system to support HIV/AIDS care and treatment will be facilitated through the use of case studies. Enrollment limited to 25 juniors and seniors. Graduate students with permission of instructor DPLL Spr PHP1400 S01 26202 T 4:00-6:30(16) (M. Ghee)

The course focuses on nutritional status influences on population health of low and middle income countries. It covers both 1) undernutrition, including protein-calorie malnutrition and specific micronutrient deficiencies; and 2) overnutrition, including obesity. It covers morbidity and mortality associated with under- and overnutrition. Nutritional aspects of maternal and child health and the association of nutritional exposures early in life and later adult health are emphasized Specific areas include nutritional status measurement, including body size and composition, dietary intake and physical activity, as well as household, community, and national, socioeconomic and political factors. Prerequisite: PHP 1070, 2120, 2150, or BIOL 0030. DPLL Spr PHP1500 S01 29887 TTh 2:30-3:50 (S. McGarvey)
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 1510. Principles of Biostatistics and Data Analysis.
This course is intended to provide a basic foundation in the methods and applications of biostatistics, and is geared towards the students whose fields of study include a substantial statistical or quantitative component. Ideally, this course is the first in a two-part sequence (the sequel being PHP 1511/2511: Applied Regression ), designed to provide students in the public health, biological and life sciences with broad-based exposure to modern methods of biostatistical inference, in addition to an understanding of underlying mathematical principles and motivations.
Fall PHP1510 S01 16951 TTh 9:00-10:20(08) (S. Chrysanthopoulou)

This course provides a survey of regression techniques for outcomes common in public health data including continuous, binary, count and survival data. Emphasis is on developing a conceptual understanding of the application of these techniques to solving problems, rather than to the numerical details. Extensive use of the computer will be made for analysis of datasets.
Spr PHP1511 S01 25845 MW 10:30-11:50 (A. Becker)

Problems and issues surrounding delivery of emergency medical services in U.S. Topics: cost of illness; rationing health care; living wills; malpractice and its effects; effects of alcohol and other risk behavior. Priority to public health concentrators and PLME students pursuing MPH degree. Enrollment limited to 60.
Spr PHP1520 S01 25992 W 3:00-5:30(14) (B. Becker)

PHP 1530. Case Studies in Public Health: The Role of Governments, Communities and Professions.
This course provides an integrated knowledge of the public health's development, policy, practice and infrastructure and its relationship to medical care, social services and the environment. The matrix approach juxtaposes public health content (e.g., infectious disease) and public health tools (e.g., behavioral theory, policy/advocacy/epidemiology/quality improvement/program planning) using case studies. It aims to strengthen students' capacity to apply a population-based viewpoint to public health practice. Prerequisite: PHP 0320. Enrollment limited to 40.
Spr PHP1530 S01 26016 T 3:00-5:30 (P. Nolan)

PHP 1540. Alcohol Use and Misuse.
Reviews the epidemiology of alcohol use, abuse, and dependence and examines its neurobiological and behavioral underpinnings. Covers etiology including physiological, genetic, psychological and social cultural influences, and prevention, brief intervention and treatment considerations. Course background in psychology, sociology, or public health is recommended. Recommended prerequisites: PHP 0320 and CLPS 0010. Enrollment limited to 20 juniors, seniors, and graduate students.
Fall PHP1540 S01 16457 TTh 9:00-10:20(08) (K. Carey)

PHP 1560. Statistical Programming in R.
Statistical computing is an essential part of analysis. Statisticians need not only be able to run existing computer software but understand how that software functions. Students will learn fundamental concepts - Data Management, Data types, Data cleaning and manipulation, databases, graphics, functions, loops, simulation and Markov Chain Monte Carlo through working with various statistical analysis. Students will learn to write code in an organized fashion with comments. This course will be taught in a "flipped" format. Students will watch a series of videos and work through some simple coding examples before coming to class.
Fall PHP1560 S01 16953 W 1:00-4:00(17) (A. Sullivan)

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 1680I. 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 PHP1680I S01 16464 W 3:00-5:30(17) (S. Skeels)

PHP 1600N. Tobacco, Smoking, and the Evil Empire.
Reviews the epidemiology of smoking and nicotine addiction and briefly examines its neurobiological and behavioral underpinnings. Covers prevention efforts and state-of-the-art treatment interventions with an emphasis on policy implications. Course background in psychology, sociology, or community health is recommended. Suggested prerequisites: PHP 0320 and CLPS 0010. Restricted to juniors, seniors, and graduate students.
Spr PHP1600N S01 26005 T 1:00-3:30 'To Be Arranged'

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(11) (G. Howard)
PHP 1710. Climate Change and Human Health.
Global climate change is occurring and these changes have the potential to profoundly influence human health. This course provides students with a broad overview of the diverse impacts of projected climate change on human health, including effects of changing temperatures, extreme weather events, infectious and non-infectious waterborne threats, vector-borne disease, air pollution, the physical and built environment and policies to promote mitigation and adaptation. Students will explore multiple sides of controversial issues through lively and informed class discussions, writing exercises, and participation in a series of end-of-term debates. Enrollment is limited to 20 students.

Fall  PHP1710  S01  17046  MW  1:30-2:50(07)  (G. Wellenius)

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(07)  (P. Risica)

PHP 1754. The Epidemiology and Control of Infectious Diseases.
Course objectives are to introduce students to key methods and concepts in the epidemiological study and control of infectious diseases. By the end of this course, students will have a solid foundation in the distribution, transmission, and pathogenesis of major infectious diseases that affect human populations. We will investigate methods to design and evaluate public health strategies to prevent or eliminate infectious diseases, including: outbreak investigation, disease surveillance, infection control, screening, and vaccination. The course is open to undergraduate students who have completed PHP320 and to graduate students who have completed or are concurrently enrolled in either PHP2120 or PHP2150.

Fall  PHP1754  S01  17184  MW  3:00-4:20(17)  (B. Marshall)

PHP 1800. Meditation, Mindfulness and Health.
This course provides an overview on the relation of meditation and mindfulness (the ability to attend in a nonjudgmental way to one’s own physical and mental processes during ordinary, everyday tasks) with various health outcomes and disease risk factors such as depression, anxiety, diet, substance use, and cardiovascular disease. Mechanisms by which mindfulness may influence health will be addressed. The course will assess studies in the field for methodological rigor, and students will be taught strengths and weaknesses of current research. Students will be taught various mindfulness practices including direct experience with mindfulness meditation.

Spr  PHP1880  S01  26007  W  3:00-5:30(14)  (E. Loucks)

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)

This course is aimed at enhancing the knowledge and skills central to the subject domain of cancer epidemiology; and helping graduate students with a deep understanding of cancer etiology that can be translated into cancer prevention and control. We will examine cancer incidence and trends both in the U.S. and globally and interpret their implication for cancer etiology, and will critically analyze current evidence regarding the role of various major risk factors on human cancer risks by focusing on cancers with significant public health implication. The methods central to cancer prevention and control will be discussed.

Spr  PHP1964  S01  25981  F  1:00-3:30  (T. Zheng)

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.

This course surveys the entire landscape of the nutritional, biochemical, and genetic aspects of cardiometabolic health addressing issues of obesity, diabetes, metabolic syndrome, and their micro- and macro-vascular complications. Students will learn about both the descriptive and analytical epidemiology of these seemingly distinct but clearly clustered disorders including the so-called metabolic syndrome comprehensively and in-depth. International comparison of prevalent data in different social contexts will also be reviewed, so that the strategies for prevention by either changing our cultures or natures can be appreciated and debated with a better understanding of the related issues confronted by public health and medical professionals.

Spr  PHP2018  S01  25988  T  9:30-12:00  (S. Liu)

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(17)  (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)

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 W 9:30-12:00(01) (J. Braun)

PHP 2118. Genomics Epidemiology.
This course will describe how epidemiologists can integrate molecular, Mendelian, and population genetics to answer substantive topics of public health significance, and also inform the students of genetics and environmental health (in particular nutrition) that all genetic and environmental interaction could be assessed and understood in an integrated manner following epidemiologic principles and methods. The content will illustrate the strengths and weaknesses of different genetic study designs for understanding the role of genetic variation in the development of traits (continuous) or outcomes (categorical) of interest in humans and help the students to understand the emerging new concepts of genomics epidemiology. Through detailed lectures, discussion and hands-on analyses appropriate for different genetic association studies, this course will include concepts from genetic epidemiology to general epidemiologic concepts (e.g. population stratification, heterogeneity, etc.).
Fall PHP2118 S01 17167 T 9:30-12:00(08) (S. Liu)

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 TTh 10:30-11:50(13) (M. Lurie)

This course provides basic principles of human biology and its applications to public health. Examples of biology topics include the cardiovascular system, endocrine system, immune system, nervous system, genetics, cancer, cardiovascular disease, HIV/AIDS, and depression. Examples of applied topics include strengths and weaknesses of using biomarkers, accuracy and precision of biological measures, quality assurance and quality control methods for using biomarkers for public health research. Mixed teaching methods are used, including small group discussions, problem-based learning and guest lectures. Prerequisite: PHP 2120 (may be taken concurrently) or instructor permission. Enrollment limited to 20 graduate students.
Spr PHP2130 S01 25989 F 9:30-12:00 (K. Kelsey)

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 TTh 10:30-11:50(13) (T. Zheng)

PHP 2180. Interpretation and Application of Epidemiologic Research.
This course builds upon the foundation of introductory epidemiology and a basic understanding of quantitative and conceptual methods, with a focus on the interpretation of the strength and meaning of epidemiologic findings. The goal is to help students develop critical thinking skills in order to become more sophisticated interpreters of epidemiologic evidence for guiding policy, clinical practice, and individual decisions, combining subject matter knowledge and epidemiologic methods to wisely evaluate the available research findings. We will focus on judging causality and identifying gaps that future research would need to fill to strengthen our understanding. Prerequisite required or permission of instructor.
Spr PHP2180 S01 25994 M 9:00-11:30 (B. Marshall)

This second course in epidemiologic methods reinforces the concepts and methods taught in PHP 2150, with in-depth instruction in issues of study design, assessing threats to study validity including confounding and selection bias, and analyzing data with standard regression models. The course emphasizes hands-on learning and includes a combination of didactic lectures, discussions of methodologic papers, and a required laboratory component where students will learn to apply the concepts learned in class to real-world problems. Prerequisites: PHP 2150 and either 2510 or 2507, or permission of the instructor. Co-requisite: PHP 2511 or 2508.
Spr PHP2200 S01 25990 MW 1:00-2:20 (G. Wellenius)

PHP 2220C. Perinatal Epidemiology.
Provides an overview of topics related to reproduction, maternal and fetal outcomes of pregnancy, and longer term consequences of adverse pregnancy outcomes. Methodological issues unique to reproductive and perinatal epidemiology are discussed, as well as general epidemiologic methods as applied to topics in reproductive and perinatal epidemiology. Students are expected to actively participate in class discussions, lead discussions related to selected topics by providing an overview of the biology, descriptive epidemiology, and known risk factors of the topic, along with a detailed critique of recently published articles on the topic. Open to graduate students only.
Fall PHP2220C S01 17059 M 3:30-6:00(15) (V. Danilack)

PHP 2220E. Topics in Environmental and Occupational Epidemiology.
This course introduces students to the epidemiological study of historical and contemporary environmental/occupational agents, focusing on study design, biases, and methodological tools used to evaluate and extend the evidence linking exposures to human disease. The course will discuss applications, strengths, and limitations of different study designs and their use in studying specific environmental agents. Didactic lectures and student-led discussions will be used to provide students with a basic understanding of and the tools to apply/extend their knowledge of specific environmental agents (endocrine disruptors) and special topics (children's neurodevelopment). Prerequisite: PHP2120, PHP2150, or equivalent. Undergrads with PHP0850 and instructor's permission.
Spr PHP2220E S01 25991 Th 9:30-12:00 (J. Braun)
PHP 2220H. The Epidemiology, Treatment and Prevention of HIV. The purpose of this seminar is to use HIV as an example to introduce students to a variety of methodological issues in the epidemiologic study of infectious diseases. While we will study the treatment and prevention of HIV in detail, emphasizing the current state of knowledge and critiquing the most recent literature, this course aims to use HIV as an example to better understand the variety of methodological issues in global and domestic infectious disease epidemiology today. Enrollment limited to 25 students. Prerequisites: PHP 0890 or PHP 1854 (undergraduates); PHP 2120 or 2150 and PHP 2508 or 2511 (graduate students).

Fall PHP2220H S01 17186 Th 2:30-5:00(04) (M. Lurie)

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, instrumental variables, propensity scores, inverse probability weighting, and marginal structural models. Settings when 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)

PHP 2300. Research Methods in Behavioral Science. 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(17) (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(08) (A. Keita)

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 Public Health concentrators. Enrollment limited to 25.

Fall PHP2340 S01 16470 T 12:00-2:30(10) (D. Williams)

PHP 2360. Designing and Evaluating Public Health Interventions. Aims to develop skills in designing and evaluating public health interventions. Levels of intervention include the individual; families or small groups; organizations such as schools, worksites, health care settings; communities; social marketing and health communications; policy and environmental changes. Will identify personal and environmental factors that affect public health and discuss needs assessment, formative research, cultural sensitivity, behavior change theories, intervention mapping, process and impact/outcome evaluation and dissemination. Students will critique intervention studies and gain experience in developing a hypothetical behavior change intervention. Graduate students and AB-MPH undergraduates only. DPLL

Spr PHP2360 S01 26017 W 3:30-6:00 (M. Mimiaga)

PHP 2365. Public Health Issues in LGBT Populations. This seminar is designed for graduate students interested in health disparities and determinants of health in LGBT populations (also referred to as sexual minority populations). Students will become familiar with key epidemiological reports, behavioral and social science theories/frameworks, intervention studies, and scientific debates related to the determinants of and disparities affecting the health of LGBT and sexual minority populations. The course will focus primarily on US populations, but will also include global LGBT and sexual minority populations. Readings and discussion will be considered in light of social, policy, and cultural contexts that frame the lives of LGBT populations.

Spr PHP2365 S01 26018 W 1:00-3:30 (D. Operario)

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(11) (P. Monti)

PHP 2380. Health Communication. This class will explore Health Communication, with a focus on behavioral and social science interventions delivered through health communication programs. The course is structured so that basic building blocks (i.e., definitions of health communication, public health context for health communications interventions, theories of health communication and health behavior change) are presented sequentially early in the semester. Students will synthesize knowledge and demonstrate their understanding of the role of health communication through a final research project. Seniors with concentration in Public Health may enroll with instructor’s permission. Enrollment limited to 20 graduate and medical students. DPLL

Spr PHP2380 S01 26019 M 2:30-5:00 (K. Carey)

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 2:00-3:20(07) (C. Kahler)
Reviews the development of the health care delivery, financing and regulatory control systems in the U.S. and reviews the literature on the relationship between health system structure and the services used and health outcomes that populations experience. A case-study approach is used to understand the inter-relationship between financing, delivery and regulatory components of the health system and their implication for public health by drawing on epidemiological, economic, political and sociological principals. Prerequisites: Graduate standing or PHP 0310 or PHP 0070 (not available to first year students or sophomores). Instructor permission required.
Spr PHP2400 S01 26002 F 1:00-3:30 (C. Koller)

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(10) (V. Mor)

PHP 2415. Introduction to Evidence-based Medicine.
Unbiased assessments of the scientific literature by means of research synthesis methods are critical for formulating public health policy, counseling patients or prioritizing future research. We focus on the methods and uses of systematic reviews and meta-analyses and their applications in medicine and health policy. After course completion, and with some direction, students will be able to undertake a basic systematic review or meta-analysis. Enrollment limited to 15 graduate students. Prerequisite: PHP 2120, 2508, or 2510. Instructor permission required.
Spr PHP2415 S01 25968 W 9:00-11:30 (T. Trikalinos)

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(09) (P. Nolan)

PHP 2440. Introduction to Pharmacoepidemiology.
The course will focus on substantive topics in pharmacoepidemiology, including relevant principles of pharmacology, inference from spontaneous case reports, study design considerations, premarketing pharmacoepidemiology, common data sources for pharmacoepidemiologic studies, drug utilization review, adherence, and the development, implementation, and assessment of therapeutic risk management policies. The course will also focus on issues in pharmacoepovigilance, including the legal and historical basis of pharmacovigilance, evaluation of individual adverse drug events, signal detection, active safety surveillance, and medication errors. A clinical background is not required. Prerequisites are PHP 2507, PHP 2508, PHP 2510, or PHP 2511, AND PHP 2120 or PHP 2150, or permission.
Spr PHP2440 S01 26004 Th 9:00-11:30 (T. Shireman)

The right to access affordable, quality health care in the US is not guaranteed. During our nation's history, a patchwork quilt of programs, referred to collectively as the safety net, has been crafted to address health care needs for a wide range of people who fall through the cracks. This course examines its structure, function, and effects. We introduce key features of the safety net: access, cost, quality, and outcomes. We pay particular attention to the nation’s largest program, Medicaid. We highlight the unique challenges facing vulnerable groups: legal and illegal immigrants, homeless populations, veterans, and people with disabilities.
Fall PHP2445 S01 17202 M 9:00-11:30(01) (T. Shireman)

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 3:00-5:30(15) (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(08) (A. Dahabreh)

PHP 2455B. Health Services Research Methods II.
This course covers commonly used statistical (regression) models for health services research, including survival analysis; examines the problem of missing data and strategies for addressing it; and provides a basic introduction to causal inference methods for time-varying exposures (including non-adherence). The goal is to familiarize students with important methods in applied work, so they can critically review the published literature and use the methods in their own research. The topics covered should be of interest to students in Health Services, Policy Practice, Epidemiology, Economics, and beyond. Pre Requisites: Successful completion of PHP 2455A or instructor permission. Interested students who have not taken PHP 2455A should contact issa_dahabreh@brown.edu to make arrangements. Those with adequate background in basic health services research or epidemiologic methods and regression analysis will be able to gain from this course, even if they have not taken PHP 2455A.
Spr PHP2455B S01 26003 M 1:00-3:30 (I. Dahabreh)

PHP 2465A. Introduction to Health Decision Analysis.
Health decision science is a discipline studying how individuals make complex decisions in the presence of uncertainty and competing objectives in public health. The course introduces decision analysis, a structured mathematical approach to studying difficult problems. We will cover basic principles and mechanics of decision modeling to inform health and clinical decision as well as cost-effectiveness analysis.
Fall PHP2465A S01 17442 W 1:00-3:30 (T. Trikalinos)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHP 2470. Topics in Clinical, Translational and Health Services Research.
Through a combination of mini-courses and seminars, students will explore concepts, gain knowledge and develop skills in a variety of public health areas. To receive a half credit for this course, students will be required to successfully complete 70 units. Units must be pre-determined by the course instructor and the unit instructor. Units are generally based on the number of in-person contact hours and the number of outside of class/homework hours required for a mini-course or seminar. Students must receive special permission from the instructor or be accepted to the Clinical and Translational Research Summer Institute to enroll.
Spr PHP2470 S01 26006 T 4:30-6:00 (A. Trivedi)

PHP 2480. Selected Topics in Global Health Economics.
This course will survey selected topics in global health economics. It is designed to introduce students to specific issues, theory and practice of health economics at the global level. The first part of the course will survey research papers on econometric methods in global health including; field experiments, instrumental variables, propensity score matching and regression discontinuity. The second part will discuss current topics such as: conditional economic incentives for providers and consumers, social health insurance, public goods, and externalities. Prerequisites: PHP 2511 and ECON 1110, or equivalent. Enrollment limited to 8 graduate students. Instructor permission required.
Spr PHP2480 S01 26000 F 3:00-5:30(15) (O. Galarraga)

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 questions. 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(02) (A. Gjelsvik)
Fall PHP2507 S01 16480 Th 1:00-2:20(02) (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 48. Instructor permission required.
Spr PHP2508 S01 25500 W 6:00-8:00PM(08) (A. Gjelsvik)
Spr PHP2508 S01 25501 Th 1:00-2:20(08) (A. Gjelsvik)

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.
Fall PHP2510 S01 16759 TTh 9:00-10:20(08) (S. Chrysanthopoulou)

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.
Spr PHP2511 S01 25500 MW 10:30-11:50(09) (A. Sullivan)

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.
Fall PHP2515 S01 16484 MW 9:00-10:20(01) (A. Sullivan)

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 suf ciency, likelihood based inference, hypothesis testing, asymptotic theory, and Bayesian inference. Measure theory not required. Open to advanced undergraduates with permission from the instructor.
Fall PHP2520 S01 16485 MW 9:00-10:20(01) (Z. Wu)

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.
Fall PHP2550 S01 16500 MW 10:30-11:50(14) (C. Schmid)

PHP 2560. Statistical Programming with R.
Statistical computing is an essential part of analysis. Statisticians need not only be able to run existing computer software but understand how that software functions. Students will learn fundamental concepts – Data Management, Data types, Data cleaning and manipulation, databases, graphics, functions, loops, simulation and Markov Chain Monte Carlo through working with various statistical analysis. Students will learn to write code in an organized fashion with comments. This course will be taught using both R and Julia languages in a flipped format.
Fall PHP2560 S01 16501 W 1:00-4:00(17) (A. Sullivan)

PHP 2580. Statistical Inference II.
This sequence of two courses provides a comprehensive introduction to the theory of modern inference. PHP 2580 covers such topics as non-parametric statistics, quasi-likelihood, resampling techniques, statistical learning, and methods for high-dimensional Bioinformatics data. Prerequisite: PHP 2520. Open to advanced undergraduates with permission from the instructor.
Spr PHP2580 S01 25972 TTh 10:30-11:50 (C. Gatsonis)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHP 2601. Linear Models. 
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.

Note: The course will cover fundamental and advanced topics in linear models, and concepts related to the generalized linear models will not be covered during the course.
Fall PHP2601 S01 16502 TTh 1:00-2:20(10) (J. Steingrimsson)

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.
Fall PHP2602 S01 16503 TTh 2:30-3:50(03) (X. Luo)

This course will focus on the theory and application of generalized linear models (GLM), a unified statistical framework for regression analyses. Specifically, we will focus on using GLMs to model the categorical outcomes. The GLM for categorical outcomes include logistic regression, proportional odds model, and Poisson regression. Maximum likelihood estimation and inference will be introduced in the GLM context. The students are expected to have knowledge of probability and inference (at the level of APMA1650, APMA1660, or PHP2520), knowledge of matrix algebra (at the level of MATH0520), knowledge of regression analysis (at the level of PHP2511) and knowledge of R.
Spr PHP2605 S01 25973 MW 1:00-2:20 (A. Eloyan)

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.
Fall PHP2610 S01 16504 TTh 9:00-10:20(08) (T. Liu)

PHP 2620. Statistical Methods in Bioinformatics, I. 
Introduction to statistical concepts and methods used in selected areas of bioinformatics. Organized in three modules, covering statistical methodology for: (a) analysis of microarray data, with emphasis on application in gene expression experiments, (b) proteomics studies, (c) analysis of biological sequences. Brief review and succinct discussion of biological subject matter will be provided for each area. Available software will be introduced. Intro level statistics (PHP 2507/2508 or PHP 2510/2511) recommended. Other students should contact instructor. Intro to software R and Bioconductor tools provided in lab. Open to advanced undergraduates with permission from the instructor.
Spr PHP2620 S01 25974 TTh 9:00-10:20(01) (Z. Wu)

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.
Fall PHP2950 S01 16505 F 1:00-1:50(15) (K. Carey)
Fall PHP2950 S02 16506 M 12:00-12:50(15) "To Be Arranged"
Fall PHP2950 S03 16507 T 12:00-12:50(15) (C. Howe)
Fall PHP2950 S04 16508 M 12:00-12:50(15) (I. Dahabreh)
Spr PHP2950 S01 25985 T 12:00-12:50 (C. Howe)
Spr PHP2950 S02 26021 M 12:00-12:50 (T. Shireman)
Spr PHP2950 S03 26022 F 1:00-1:50 (K. Carey)
Spr PHP2950 S04 26023 M 12:00-12:50 (Z. Wu)

Public Policy

PLCY 0100. Introduction to Public Policy. 
An overview of policymaking and policy analysis in the contemporary United States. The course begins with an examination of traditional justifications for government action. We will then examine the discipline of policy analysis that has arisen to design and evaluate public policies. We will also consider critiques of the rational method and ask questions about how policy expertise fits into the political system. The course ends with classic works on organizations and implementation. Not open to graduate students. WRIT
Fall PLCY0100 S01 16783 TTh 2:30-3:50(03) (R. Hackey)

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. Prerequisite: PLCY 0100, and POLS 1600 or EDUC 1110 or SOC 1100 or ECON 1620, or written permission of instructor. Enrollment limited to 40 Political Science and Public Policy concentrators. WRIT
Spr PLCY1200 S01 26030 TTh 9:00-10:20(01) "To Be Arranged"

PLCY 1400. Ethics and Public Policy. 
What are the moral foundations of public policy analysis? How should individuals act when faced with ethical dilemmas in public life? This course will engage those questions in depth, beginning with case studies in ethics and policy and moving to cases involving ethical quandaries and moral dilemmas in public life.
Fall PLCY1400 S01 17058 TTh 1:00-2:20(10) (R. Cheit)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PLCY 1700K. Health Policy Challenges.
This course examines the topic of health reform through a variety of lenses – politics, policy, community organizing, and bureaucratic implementation. Specific issues include recent reform efforts at the national and state levels, including the Affordable Care Act and several Rhode Island state legislative campaigns over the past twenty years. During each of these legislative victories (or defeats), the interplay between politics and policy, community organizing and implementation have defined how successful the laws have been in improving people's access to quality, affordable healthcare.
Spr PCY1700K S01 25598 M 3:00-5:30(13) (R. Hackey)

PLCY 1700M. Law and Public Policy.
This course will give students an introduction to business organizations – the law that governs corporations and partnerships, how they raise money in the financial markets, and to explore the public policy issues that inform the regulation of business and finance. We will look at business organizations, law that governs how companies raise money, operation of the stock markets, insider trading, and the regulation of institutional investors including mutual funds, hedge funds and private equity funds. We will finish by taking up corporations as persons, their social obligations and the recent Supreme Court cases on corporations and the First Amendment.
Spr PCY1700M S01 26032 T 4:00-6:30(16) 'To Be Arranged'

PLCY 1700Q. Urban Policy Challenges: Spatial Inequality in Metropolitan America.
We will read, analyze, and discuss seminal texts within American urban history to examine the historic relationship between social policy and spatial inequality in 20th-century American metropolitan development. Students will have a passing familiarity with how the confluence of federal policies, regional economies, and local policies has constructed metropolitan landscapes with inequitable distributions of both public and private resources. Students will gain experience in oral and written analysis of how housing policies have historically influenced the interaction and engagement of disparate identity groups, including diasporic black, Latinx, Asian-American, and white ethnic communities, with metropolitan American civic institutions. DPLL
Fall PCY1700Q S01 17389 Th 4:00-6:30(04) (A. Pratcher)

PLCY 1701H. Congressional Leadership, Parties and Public Policy.
Focuses on the Congressional leadership, parties in Congress and their impact on political interactions, and public policy. The course will examine the relationship between the leadership in Congress and the powerful elements in the House and Senate such as committee chairmen and the party caucuses as well as the media and lobbyists. Emphasis is on the decades long trend toward greater political polarization and its impact on the ability of the institution to respond effectively to address critical national priorities such as the federal debt, health reform immigration, nuclear proliferation and global warming. Enrollment limited to 20 juniors, seniors and graduate students.
Spr PCY1701H S01 26035 F 9:00-11:30 (R. Arenberg)

PLCY 1702A. Justice, Gender, and Markets.
This course will explore two main questions: how poor women connect to markets and how philosophical ideas about gender have influenced ideas about gender and justice and consequently, gender, justice and markets. These questions help us explore how justice, gender, and markets interact and create conditions that keep millions of women trapped in poverty. They help us then develop policies and programs that might help women escape entrenched poverty.
Spr PCY1702A S01 26031 W 3:00-5:30(14) 'To Be Arranged'

This course examines the range of approaches to making social change through democratic institutions and processes in the U.S. These approaches-- direct service, community organizing, policy/politics, philanthropy, social entrepreneurship and research/scholarship-- have different value systems, methodologies, strengths and limitations. There's no one "right" approach, and the modes often intersect in ways that can be mutually reinforcing or counterproductive. The course will be valuable to students interested in being involved in social change during their time at Brown and in their future careers.
Fall PCY1800 S01 16988 T 4:00-6:30(09) (M. Rosenberg)

PLCY 1802. Engaged Research Engaged Publics.
Policy problems are complex. Policy analysis and design is both a science and a craft. Increasingly, policymakers have begun to acknowledge that effective policy research requires not only multiple methods of inquiry, but also interdisciplinary teams of social science researchers, citizens, designers, scientists, artists, consultants, and engineers, among other experts. Generating innovative policy solutions, from this approach, is not a straightforward, linear process, but instead a creative, collaborative, and engaged activity that requires not only iterative and dynamic research methods, but also storytelling, design, and other creative methods.
Fall PCY1802 S01 16987 Th 3:00-5:30(05) (A. Levitas)

This course is the required reflection seminar for participants in the Brown in Washington, D.C. program. The course is grounded in the 25 hour/week practicum that each student will complete during the semester. Potential placement sites include: government/public sector agencies (e.g., federal cabinet agencies, Congressional offices, state or municipal executive or legislative offices); not-for-profit organizations; and other organizations with a mission to support a range of types of work/placements for students. The seminar will examine issues in engaged scholarship and civic engagement through readings, case studies, participatory activities, and guest speakers.
Fall PCY1822 S01 17390 Arranged (A. Hance)

The Brown in Washington, D.C. practicum course is designed to provide students with a hands-on learning experience to complement their academic work at Brown. The course will feature 25-hour/week internships assigned to students based on their personal interests, policy interests, and post-Brown career objectives. Students will be able to reflect on this internship experience and how it relates to their academic and post-Brown life during weekly reflection seminar classes that will also include career skill development sessions that can be directly applied to the internship experience and beyond.
Fall PCY1823 S01 17391 Arranged (A. Hance)

PLCY 1801. 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/ lIjUKSwXc4 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 PCY1801 S01 16792 TTh 10:30-11:50(13) (A. Harlam)

PLCY 1910. 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.
the center of our discussion. Development. We will compare and contrast the various Asian countries phenomenon. Political processes are intimately tied up with economic It is widely accepted that development is not simply an economic Asia

PLCY 2140. Politics, Public Policy, and Economic Development in

It is widely accepted that development is not simply an economic phenomenon. Political processes are intimately tied up with economic development. We will compare and contract the various Asian countries and models of development around themes identified above. The heaviest emphasis will be on China, India and South Korea. Economic policy will be the center of our discussion.

Fall PLCY2140 S01 17432 T 1:30-4:00 (A. Varshney)
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

Spr RELS0015 S01 24334 MWF 12:00-12:50(05) (S. Harvey)

The New Testament, the product of a Jewish social movement two thousand years ago, remains one of the most interesting and important collections of texts in history. This course explores the origins of these texts in their social context, and through close readings, the development of the various theologies contained within them. Comparisons will also be made to ancient Jewish, Greek, and Roman texts and the non-canonical Christian texts that were contemporary with the New Testament. In addition, the modern appropriation of the “Jesus paradigm” in film and pop culture will be discussed. WRIT

Fall RELS0022 S01 16708 TTh 9:00-10:20(08) (L. Willis)

RELS 0030. Sound, Song and Salvation in South Asia.
Sound, Song and Salvation in South Asia explores both the theoretical formulations and the performative expressions that constitute the inextricable nexus of sound, music and religious practice in South Asia. By investigating fundamental concepts such as nada, raga, bhakti and rasa, this course historicizes the ongoing discourse on the soteriological underpinnings of several genres of South Asian music from Vedic chanting to Hindustani and Carnatic music traditions. DPLL

Fall RELS0030 S01 17492 MWF 11:00-11:50(16) (S. Reddy)

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 2:30-3:30(03) (H. Roth)

RELS 0045. Buddhism and Death.
Death is universal but seldom discussed in contemporary culture. In this class we will address how the varieties of Buddhist religion represent and anticipate end goals of the contemplative life. The study of path formulations and the performative expressions that constitute the inextricable nexus from McGill. The class will move between theories and practices, and past and current events. Coming to terms with these diverse materials may reveal to us some of our own assumptions about death, dying, and the afterlife. WRIT

Fall RELS0045 S01 17074 TTh 10:30-11:50(13) (J. Protass)

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. DPLL

Fall RELS0050 S01 15382 MWF 1:00-1:50(06) (M. Cladis)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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/CS01 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. FYS 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. FYS
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) (S. Bashir)

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 24336 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) (S. Bashir)

RELS 0195. Gender in Early Jewish and Christian Narratives.
Many of the favorite narratives of Jews and Christians in the ancient period (for this course, about 400 BCE to 300 CE) featured women characters or emphasized issues of gender: Esther, Judith, and Susanna; Mary Magdalene and other gospel women, or Thecla, the perhaps legendary companion of Paul. Both Jewish and Christian texts used gender to explore new ways of constructing heroic women and men that either re-inscribed or challenged traditional roles. This seminar takes up a close reading of narrative texts, compared also with wisdom texts (Proverbs, Ben Sira, Wisdom of Solomon, Avot). DPLL
Fall RELS0195 S01 17124 T 4:00-6:30(09) (L. Willis)

RELS 0290G. The Ten Commandments (JUDS 0686).
Interested students must register for JUDS 0686.
Fall RELS0290G S01 17136 Arranged 'To Be Arranged'

RELS 0326. How the Bible Became Holy (JUDS 0682).
Interested students must register for JUDS 0682.
Spr RELS0326 S01 25532 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
RELS 0415. Ancient Christian Culture.
How did the Jesus movement that originated in a backwater of the Roman Empire become the Empire’s dominant religion? What was it like to be a Christian in a world full of religions, cults and philosophical traditions, and of diverse social and cultural identities? An introduction to the history of early Christianity, and to the ancient Christian culture through the exploration of selected topics by means of textual, material and epigraphic evidence. Multiple Christianities; literacy and orality; visual culture; the episcopal authority; wealth and poverty; asceticism and monasticism; hagiography and the cult of saints; sacred landscape and pilgrimage; women, gender; burial.
Fall RELS0415 S01 17489 MWF 10:00-10:50(14) (D. Ivanisvic)

RELS 0600C. Radical Islam (?).
One of the most controversial issues in contemporary political discourse is the question of radicalization and its relationship to Islamic religion and practice. In this course, we will explore the phenomenon of religious radicalization, and explore its relationship to a number of institutions and issues, including but not limited to: religious texts, terrorism, global politics, war, immigration, nationalism, and law. DPLL WRIT
Fall RELS0600C S01 15385 TTh 1:00-2:20(10) (N. Khalek)

RELS 0835. Edward Said and Cornel West.
This course explores intersections between race and religion through two of the most influential thinkers of the 20th century: Edward Said and Cornel West. Said was a pioneer in the study of Orientalism, challenging discourses about “the East,” Islam, and imaginary “other” against whom notions of “the West” were created and sustained. West distinctively shaped Black critical thought, foregrounding Black American subjectivity as a way of understanding modernity. We will examine the racialization of religion; transnational solidarity; and what religious thought offers for struggles for racial justice in sites like Ferguson, Missouri, Black Lives Matter, and Palestine and Israel.
Spr RELS0835 S01 25646 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 RELS0880C S01 16815 '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 'To Be Arranged'

RELS 1213. Gods and Myths in Mesopotamia (ASYR 1100).
Interested students must register for ASYR 1100.
Spr RELS1213 S01 25874 '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 RELS1325D S01 26226 'To Be Arranged' (S. Harvey)

RELS 1340A. Roman Religion (CLAS 1410).
Interested students must register for CLAS 1410.
Fall RELS1340A S01 17138 'To Be Arranged'

RELS 1375. Heidegger, the Jews, and the Crisis of Liberalism (JUDS 1614).
Interested students must register for JUDS 1614.
Spr RELS1375 S01 25532 '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 1397. Classical Philosophy of India (CLAS 1140).
Interested students must register for CLAS 1140.
Fall RELS1397 S01 17135 Arranged 'To Be Arranged'

RELS 1425. Buddhist Poetry.
This course surveys Asian and Anglophone literary cultures that emerged in response to Buddhist teachings and practices. Through close reading, we will engage epic poetry celebrating the Buddha’s life; verses in Buddhist scripture; the landscape poetry of Chinese hermits; the poetry of early nuns; Japanese poems of spiritual travel; American beatniks; and contemporary Taiwanese poetry. All readings are available in English. Students may complete a creative or imitative project, an original translation, or a research paper for the final project.
Spr RELS1425 S01 25707 M 3:00-5:30(13) (J. Protass)

RELS 1530D. Medieval 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 RELS1530D S01 24342 Th 4:00-6:30(17) (N. Khalek)

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 Feuerbach, Marx, Nietzsche, Barth, Horkheimer, Adorno, Gadamer, Foucault, Said, Gutiérrez, Schüller-Florenza, and Butler. Enrollment limited to 20.
Spr RELS1760 S01 24344 T 12:00-2:30(11) (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 history of religions, with attention to issues in current debate.
Fall RELS2000 S01 15387 T 12:00-2:30(10) (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 6:00-8:30PM(13) (S. Olyan)
RELS 2101. The Court Narrative in Ancient Israel.
A number of ancient Israelite and Jewish narratives are set in the court of
the foreign king: the story of Joseph in Genesis 37-50, Esther, Daniel 1-6
(along with the additions from the Apocrypha: Susanna and Bel and the
Dragon), and the Prayer of Nabonidus from Qumran. These entertaining
narratives are often set off from the more strictly historical tradition, and
seem to have been part of a resilient and international genre of popular
stories. In this course we will read and analyze these narratives in their
original Hebrew, Aramaic, and Greek.
Spr RELS2101 S01 25835 Th 4:00-6:30(17) (L. Willis)

RELS 2110A. Religion and Romanticism: Religion, Democracy, and
the Environmental Imagination
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 3:00-5:30(14) (M. Cladis)

RELS 2350C. Readings in Neo-Confucianism.
Emphasis on Neo-Confucian--Zen Buddhist debates and apologetics,
mainly in the Japanese context but with attention to continental sources.
Weekly reading and translation of primary texts in Chinese and/or
Japanese, plus a final research paper.
Spr RELS2350CS01 25623 W 3:00-5:30(14) (J. Sawada)

RELS 2380A. Chinese Buddhist Texts.
Each week we will engage in close reading through translation of
Buddhist texts in the original Chinese. Selections will draw from sutras,
commentaries, prefaces, colophons, biographies, and Chan literature.
The course introduces research methods, major sources, dictionaries,
and digital tools, and culminates in a seminar paper demonstrating original
research using the tools and methods practiced in class. Prerequisite:
Reading competence in classical Chinese.
Fall RELS2380A S01 17273 Th 4:00-6:30(04) (J. Protass)

RELS 2400J. Stories of the Prophets in Medieval Islamic Literature.
In this graduate level seminar we will learn about the literary genre "Stories
of the Prophets" and its relationship to biography and historiography in
the Classical period of Islamic thought. We will also explore the relevant
secondary literature. Reading knowledge of Classical Arabic and prior
coursework in Islamic Studies required.
Fall RELS2400J S01 16927 W 3:00-5:30(17) (N. Khalek)

RELS 2450. Exchange Scholar Program.
Fall RELS2450 S01 15027 Arranged ‘To Be Arranged’

RELS 2500A. Magic in Antiquity.
What, if anything, distinguishes "religion" from "magic"? This course will
focus both on this theoretical problem and on the texts and practices
from across the ancient Mediterranean and West Asia that have typically
been considered under the rubric of "magic." We will look at first-order
discourse (i.e., how people in antiquity drew boundaries between religion
and magic) and case-studies of scholarly discussions of ancient magic.
The approach is cross-cultural and students will present cases from their
own areas of expertise.
Spr RELS2500A S01 25698 W 3:00-5:30(14) (M. Satlow)

RELS 2600D. Pragmatism and Religion.
Readings in the original American pragmatists and their recent admirers
with special attention to the topic of religion.
Spr RELS2600DS01 24346 Th 12:00-2:30(10) (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, 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-Theism 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-
Theism.
Fall RELS2600L S01 15389 Th 12:00-2:30(10) (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 3:00-5:30(15) (S. Bashir)

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.

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
Interested students must register for POBS 0910.
Fall REMS0910 S01 17318 Arranged ‘To Be Arranged’

REMS 1266C. English History, 1529-1660 (HIST 1266C).
Interested students must register for HIST 1266C.
Fall REMS1266C S01 17319 Arranged ‘To Be Arranged’

REMS 1266D. British History, 1660-1800 (HIST 1266D).
Interested students must register for HIST 1266D.
Spr REMS1266D S01 25880 Arranged ‘To Be Arranged’

REMS 1410T. L’expérience des réfugiés/immigrés (FREN 1410T).
Interested students must register for FREN 1410T.
Fall REMS1410T S01 16992 Arranged ‘To Be Arranged’

REMS 1440. The Ottomans: Faith, Law, Empire (HIST 1440).
Interested students must register for HIST 1440.
Spr REMS1440 S01 25961 Arranged ‘To Be Arranged’

REMS 1560A. Italy and the Mediterranean (HIAA 1560A).
Interested students must register for HIAA 1560A.
Spr REMS1560A S01 25489 Arranged ‘To Be Arranged’

REMS 1825F. Nature, Knowledge, Power in Renaissance Europe
(HIST 1825F).
Interested students must register for HIST 1825F.
Spr REMS1825FS01 25878 Arranged ‘To Be Arranged’
Science and Society

SCSO 0700G. Skill: From to the Medieval Workshop to the Maker Movement (AMST 0105E).
Interested students must register for AMST 0105E.
Fall SCSO0700G S01 17142 Arranged 'To Be Arranged'

Interested students must register for ENGN 0020.
Spr SCSO0280 S01 25809 Arranged 'To Be Arranged'

SCSO 0382. Food and Drugs in History (HIST 0150H).
Interested students must register for HIST 0150H.
Fall SCSO0382 S01 17139 Arranged 'To Be Arranged'

Interested students must register for HIST 0270A.
Fall SCSO0383 S01 17140 Arranged 'To Be Arranged'

SCSO 0700B. Science and Social Controversy.
In this course we examine the institution of science and its relations to the social context in which it is embedded. Scientific objectivity, scientific consensus, scientific authority, and the social and moral accountability of scientists will be considered in the context of discussing such controversies as: the AIDS epidemic, climate change, science and religion, the Manhattan Project, the Tuskegee Syphilis Experiment, genetic and pharmacological enhancement, the role of drug companies in science and medicine, psychiatric diagnosis and medication, robotics, and the implications of neuroscience for free will and moral responsibility. Enrollment limited to 20 first year students and sophomores. WRIT
Fall SCSO0700B S01 17036 Th 4:00-6:30(04) (J. Poland)

SCSO 0700G. Digital Media in the Time of Ecological Crisis (MCM 0902C).
Interested students must register for MCM 0902C.
Fall SCSO0700G S01 17258 Arranged 'To Be Arranged'

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 10:30-11:50(09) (J. Richards)

SCSO 1155. Astronomy Before the Telescope (ASYR 1600).
Interested students must register for ASYR 1600.
Spr SCSO1155 S01 25869 Arranged 'To Be Arranged'

Interested students must register for HIST 1977B.
Spr SCSO1396 S01 25868 Arranged 'To Be Arranged'

SCSO 1522. Philosophy of Science (PHIL 1590).
Interested students must register for PHIL 1590.
Fall SCSO1522 S01 17133 Arranged 'To Be Arranged'

SCSO 1700P. Neuroethics.
In this course, we will examine ethical, social, and philosophical issues raised by developments in the neurosciences. Topics will include: neurodevelopment and the emergence of persons; the impact of child abuse on brain development; aging, brain disease, and mental decline; life extension research; strategies and technologies for enhancement of human traits; "mind-reading" technologies; agency, autonomy, and excuse from responsibility; error and bias in memory; mind control; neuroscientific and evolutionary models of religious belief and moral judgement. Enrollment limited to 20. Instructor permission required.
Spr SCSO1700P S01 25677 Th 4:00-6:30(17) (J. Poland)

SCSO 1701E. Race, Difference, and Biomedical Research: Historical Considerations (BIOL 1920D).
Interested students must register for BIOL 1920D.
Spr SCSO1701E S01 25808 Arranged 'To Be Arranged'

Interested students must register for HIST 1960Q.
Fall SCSO1701O S01 17141 Arranged 'To Be Arranged'

SCSO 1701P. The Anthropocene (ENVS 1910).
Interested students must register for ENVS 1910.
Spr SCSO1701P S01 25870 Arranged 'To Be Arranged'

SCSO 1900. Senior Seminar in Science and Society.
This is an advanced seminar that uses a Problem Based Learning style pedagogy to explore real-world problems in STS. To solve assigned problems students will want to explore critical scholarship in areas such as laboratory studies, feminist science and technology studies, the rhetoric and discourse of science and technology, expertise and the public understanding of science. Course is intended for Science and Society senior concentrators, but is open to others with appropriate background. Enrollment limited to 20.
Fall SCSO1900 S01 17037 T 4:00-6:30(09) (J. Poland)

Independent research 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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**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 0200. 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. CZCH 0200 includes readings of annotated literary texts on the Web. Five meetings per week and use of audio/visual materials. Enrollment limited to 18.

Spr CZCH0200 S01 25739 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 Svankmajer 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 1960's 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 24153  W  3:00-5:30(17) (M. Fidler)

**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 the same name. The course is for students who completed CZCH0410 or the equivalent. Enrollment limited to 18.

Spr CZCH0610B 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 1:00-2:50(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 12:00-12:50(12) (M. Harrison)
Fall PLSH0300 S01 15170 MWF 12:00-12:50(12) (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"

**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 studies.

Fall PLSH1150 S01 15172 TTh 9:00-10:00(08) (M. Harrison)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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(15) (L. deBenedette)
- Fall RUSS0100 S01 15369 TTh 12:00-12:50(15) (L. deBenedette)
- Fall RUSS0100 S02 15370 MWF 11:00-11:50(15) (L. deBenedette)
- Fall RUSS0100 S02 15370 TTh 11:00-11:50(15) (L. deBenedette)
- Fall RUSS0100 S03 15371 MWF 12:00-12:50(15) (L. deBenedette)
- Fall RUSS0100 S03 15371 TTh 12:00-12:50(15) (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 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)

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(15) (L. deBenedette)
- Spr RUSS0200 S02 24327 MWF 11:00-11:50(15) (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 0100 or RUSS 0200 or RUSS 0250 or placement by exam. Enrollment limited to 18.

- Fall RUSS0300 S01 15372 MWF 10:00-10:50(04) (F. Fenghi)
- Fall RUSS0300 S02 15373 MWF 11:00-11:50(04) (F. Fenghi)

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 0600. 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. Four class meetings per week. Prerequisites: RUSS 0500 or placement. Enrollment limited to 18.

- Spr RUSS0600 S01 24329 TTh 1:00-1:50(06) (L. deBenedette)
- Spr RUSS0600 S01 24329 MWF 1:00-1:50(06) (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 0600 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) "To Be Arranged"

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 TTh 10:30-11:50(09) (A. Levitsky)

RUSS 1250. Russian Cinema.
The seminar will provide a chronological overview of Russian cinema from its beginning to the present. The films will be considered against the backdrop of some historical, political, and theoretical readings. The students will also be encouraged to juxtapose Russian and non-Russian films in order to evaluate the place of Russian cinema within a global film culture. Enrollment limited to 20.

- Spr RUSS1250 S01 25571 Th 4:00-6:30(17) "To Be Arranged"

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, Turgenev, Leskov, and Dostoevsky. Lectures and discussion. No knowledge of Russian required. Discussion sections to be arranged. WRIT

- Fall RUSS1290 S01 15145 TTh 10:30-11:50(13) (A. Levitsky)
RUSS 1340. The Russian Novel. When one considers the impact of Russian literature on world literature, one thinks first of all of the novel. And indeed, since the late nineteenth century its readers all over the world could not resist its artistic powers. The course explores selected Russian novels form the nineteenth- to the twenty-first century. Our in-depth (slow) reading and discussions will be guided by the questions concerning the stylistic peculiarities of the novel, and its development in changing historical and cultural contexts. The course includes: Gogol’s Dead Souls, Goncharov’s Oblomov, Dostoevsky’s Idiot, Bely’s Petersburg, Nabokov’s Mary, Platonov’s Chevengur, among others. WRIT
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, Solgobub, Remizov, Blok, Bely, Zamiatkin, Pilnyak, and Mandelshtam. 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 3:00-5:30(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, film, 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 15157 M 3:00-5:30(15) (S. Evdokimova)

RUSS 1885. Literature and Art of the Russian Avant-Garde. Examines the Russian avant-garde between 1912, the year of the first Russian futurist manifesto, and early 1930s when Social Realism became this only sanctioned style of art. This, arguably the most vibrant period in Russian art, permeated with unprecedented sense of creative and political urgency, coincided with the WWI and the Russian Revolution, which provide historical contexts for the analyzed works. Also stresses aesthetic and historic interconnections between the Russian and western avant-gardes. Includes the works of poetry, book design, painting, and film by such artists as Pasternak, Mayakovsky, Khlebnikov, Mandelshtam, Meyerhold, Malevich, Rodchenko, Eisenstein, among others.
Fall RUSS1885 S01 17099 MWF 11:00-11:50(16) (M. Oklot)

RUSS 1960. Independent Study. 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 during the semester when the project is undertaken). Please check Banner department (deadline: the last day of fall). Please check Banner department (deadline: the last day of fall).
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, Mandelshtam – 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 F 3:00-5:30(11) (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 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). Each section limited to 10 students; instructor permission required.

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). Each section limited to 10 students; instructor permission required.

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 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.

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 0020. 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. WRIT
Spr SOC0020 S01 25004 MWF 1:00-1:50(06) (G. Elliott)

SOC 0030. Race, Immigration, and the Making of Inequality.
In what ways has the interpretation of race and immigration shaped the current system of stratification in American society? This course focuses on answering this question from a historical and contemporary perspective. Using a sociological approach, we analyze the meaning of ethno-racial formation and categorization and survey the different processes that contribute to ethno-racial inequality. Engaging empirical research, we pay special attention to how individuals and groups interpret and experience the institutional arrangements that perpetuate exclusion and disadvantage by race and immigration status. The course aims to provide the analytical tools required to understand race relations in everyday life.
Fall SOC0030 S04 17563 M 3:00-5:30(15) (L. Lopez-Sanders)

Emphasis on understanding the interrelationships 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.
Spr SOC0150 S01 25005 MWF 12:00-12:50(05) (P. Henry)

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.
Spr SOC0170 S01 25073 MWF 10:00-10:50(03) (C. Spearin)

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. Enrollment limited to 20 first year students. FYS WRIT
Spr SOC0300A S01 25074 Th 4:00-4:50(17) (M. Kennedy)

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.
Enrollment limited to 20 first year students. FYS WRIT
Fall SOC0300F S01 16296 M 3:00-5:30(15) (M. Jackson)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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.
Fall SOC0310 S01 16371 T 4:00-6:30(09) (A. Hance)

Why do we follow social rules and conventions? And how is social change -- that is, the making of new rules and expectations -- possible? When we respond to rules, do we act as free-willing individuals or do we follow social structures we have no control over? These questions have motivated generations of sociologists, but many of the arguments have been already developed by the four "forefathers" of sociology: Karl Marx, Max Weber, Emile Durkheim, and Georg Simmel. Looking at the transformations around them -- the rise of capitalism, the modern nation-state, rational bureaucracy, the metropolitan, the decline of religion, and much more -- they developed arguments that allow us to better understand ourselves, our actions, and the contemporary political, economic and social transformations around us. WRIT
Fall SOC1010 S01 16297 TTh 1:00-2:20(10) (P. Henry)

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) (B. Ozkazanc-Pan)

SOC 1070. Introduction to Economic Sociology.
Money makes the world go round. Money talks. Show me the money.
This course addresses the ways money pervades social life. We examine money through multiple disciplines, from politics, history and finance, to gender, religion, and art. Relevant to concentrators in any of those fields, while also offering a critical perspective particular to sociology.
Spr SOC1070 S01 25638 TTh 2:30-3:50(11) (D. Hirschman)

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 16298 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 MW 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)

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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
forms of violence in our society, including gang violence, bullying, violence. WE focus on specific societies. Next, we examine the culture of violence that permeates our knowledge of these key theories, which will be applied in high-profile discussions will specifically focus on individuals' careers and employment pertaining to work, employment, and labor markets. Readings and class SOC 1352. Employment and Labor in the New Economy. 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.

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.

SOC 1440. Intimate Violence. Explores sociological perspectives of violence in intimate relationships. Begins with theories of violence, including social learning theory, the frustration-aggression hypothesis, and violence as catharsis. Examines the contributions of gender, race status, media violence, and pornography to the issue. Investigates specific forms of intimate violence: sexual aggression (including "acquaintance rape"), partner abuse, elderly abuse, and child abuse. Not open to first year students. WRIT Fall SOC1440 S01 17533 MWF 1:00-1:50(05) (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 swearercenter.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 4:00-6:30(16) (M. Johnson)

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. Schnank)

SOC 1871F. The Sociology of Labor Markets. 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)

SOC 1352. Employment and Labor in the New Economy. 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 1315. Macro-Organizational Theory: Organizations in Social Context. 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?

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)

SOC 1352. Employment and Labor in the New Economy. 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 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 1872H. Sociology of FIRE: Finance, Insurance, + Real Estate
This seminar explores the sociology of finance, insurance, and real estate (the "FIRE" sector). Topics covered include: the causes and consequences of the growth of finance, the morality of life insurance, gender discrimination, race and the role of the state in the mortgage market, the interplay between innovation and regulation, and the 2008 financial crisis. We will ask whether the benefits of modern finance are worth its costs, and whether finance merely reflects existing social and economic inequalities, or if there are mechanisms by which finance creates or reinforces those inequalities.
Fall SOC1872H S01 17045 W 3:00-5:30(17) (D. Hirschman)

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(10) (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(01) (D. Lindstrom)

SOC 2030. Social Stratification, Inequality and Mobility.
This course provides an introduction to contemporary literature on social stratification, social mobility, inequality in the United States, abroad, based on research articles and books. We focus on theories, data, methods, facts about categorical dimensions of inequality (race, ethnicity, gender, sexual orientation); core dimensions of stratification systems (income, earnings and wealth distributions; poverty; education; the intergenerational transmission of socioeconomic status; social mobility); social institutions that govern social stratification (families, schools, labor markets, and the justice system); key inequalities that stem from stratification systems (e.g., health). This is a reading course, not a research seminar. Prerequisites include Sociology 2010 or equivalent.
Fall SOC2030 S01 16994 T 9:00-12:00(08) (M. Jackson)

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, Emile Durkheim and others.
Fall SOC2040 S01 16309 M 9:00-12:00(01) (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(01) (P. Heller)

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(08) (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.
Spr SOC2210 S01 25047 M 2:00-5:00(07) (J. Pacwicz)

SOC 2230. Techniques of Demographic Analysis.
Procedures and techniques for the collection, evaluation, and analysis of demographic data; measures of population composition, fertility, morbidity, and migration; construction of life tables, population and projections, population dynamics; responsible use of demographic methodology. Mandatory S/NC.
Spr SOC2230 S01 25048 T 1:00-4:00(11) (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(07) (D. Lindstrom)
SOC 2260D, Race, Ethnicity, and Nation: Boundaries, Identities, Inequalities.
This seminar aims to provide students a solid base in the analysis of racial and ethnic boundaries, identities, and inequalities. The seminar addresses a number of central topics in the field and acquaints the students with some key works. The course is divided in three parts. The first part focuses on how race constituted the modern world and on contemporary forms of racialization. The second part focuses on the construction of nations and challenges to their ethnic and racial boundaries. The third part of the course looks at contemporary boundaries of race and ethnicity in the United States. Open to upper level undergraduates with permission of instructor.
Fall SOC2260D S01 17537 W 1:00-4:00 (J. Itzigsohn)

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(02) (S. Short)

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(09) (A. Schrank)

SOC 2450, Exchange Scholar Program.
Fall SOC2450 S01 15036 Arranged "To Be Arranged"
Spr SOC2450 S01 24052 Arranged "To Be Arranged"

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(02) (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(04) (J. Logan)

SOC 2960G, Spatial Data Analysis Techniques in the Social Sciences.
Survey course of statistical methods that can be used to analyze spatial and/or clustered data at the individual and aggregate levels. Topics include multilevel analysis; fixed effects approaches; spatial choice; spatial autocorrelation, heterogeneity and dependence. Application with real data. Not a course about Geographic Information Systems (GIS) or mapping techniques.
Fall SOC2960G S01 17538 W 9:00-12:00 (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(02) (M. Kennedy)

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 15037 Arranged "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.
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"

S01 Course Descriptions

SOC XLIST, Courses of Interest to Students Concentrating in Sociology.

Fall 2017
The following related courses, offered in other departments, may be of interest to students concentrating in Sociology. Please see the course listing of the sponsoring department for location and time.

Environmental Studies
ENVS 0150 Climate Futures and a Sociology of Just Transitions
ENVS 1575 Engaged Climate Policy at the UN Climate Change Talks
ENVS 1920 Methods for Interdisciplinary Environmental Research

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(08) (C. Crawford)
Fall TAPS0030 S02 16011 TTh 3:00-5:20(09) (S. d'Angelo)
Spr TAPS0030 S01 24866 TTh 9:30-11:50(01) (C. Crawford)
Spr TAPS0030 S02 24868 TTh 3:00-5:20(11) (S. d'Angelo)

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 1010C 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 TAPS100 S01 16015 F 1:00-3:50(11) (K. Searle)
Fall TAPS100 S02 16016 TTh 1:00-2:20(10) (E. Terry-Morgan)
Spr TAPS100 S01 24918 T 1:00-3:50(11) "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 TAPS200 S01 15995 T 1:00-3:50(03) (J. Izumi)
Spr TAPS200 S01 24930 F 1:00-3:50(15) "To Be Arranged"

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

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.

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.

TAPS 0260. Stage Lighting.
This course is an introduction to stage lighting. Enrollment limited to 20.

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.

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.

TAPS 0330. Mande Dance, Music and Culture.
Examines, by theory and praxis, 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.

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.

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.

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.

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 a TAPS production and/or observing other TAPS and Trinity Rep stage managers during the production process. Enrollment limited to 12.

TAPS 1175. Acting Shakespeare.
This course centers on the methods of crafting performance in Shakespeare's works. Through a cross-disciplinary study of text analysis, vocal work, movement and Elizabethan history and culture, students will investigate the meaning, the music and theatrical power of acting Shakespeare's works. Special focus will be given to Shakespeare's works that comment on gender bias and identity, otherness and abuse of power. Prerequisite: TAPS 0230. This course is open to qualified sophomores, juniors, and seniors. The application is required (see brown.edu/go/TAPS 1175) and substantial commitment and attendance is mandatory. Instructor permission required. No permission will be given during pre-registration.

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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
TAPS 1230. Global Theatre and Performance: Paleolithic to the Threshold of Modernity
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(13) (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 "performance" state and religious ceremonies from 1500-1850. We will explore incidents in Asia, the Americas and Europe as related to state consolidation, colonization, incipient modernization, cultural negotiation, and the representational practices enacted. Enrollement limited to 35. WRIT
Spr TAPS1240 S01 24919 TTh 10:30-11:50(09) (L. Hilton)

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 1:00-2:20(10) (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(03) (T. Het)

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(07) (R. Surprenant)

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 S02 17169 W 3:00-5:30(15) (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(17) (R. Cesario)

TAPS 1281W. Artists and Scientists as Partners
This course focuses on current research 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. DPLL
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. DPLL
Spr TAPS1281Z S01 24923 TTh 2:30-3:50(11) (J. Strandberg)

TAPS 1285. Film Acting
This advanced acting class is designed to teach the actor how to apply the screenplay as a blueprint for the finished film and to familiarize the actor with the actual process of working on a film set. Utilizing an extensive library of screenplays, the class will learn film scene analysis and preparation, pro-active choice, and heightened connection. They will develop and hone the skill to remain present and vital through multiple takes of the scene, always keeping emphasis on process rather than presentation.
Fall TAPS1285 S01 17249 MW 9:00-11:50(01) "To Be Arranged"

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(07) (R. Surprenant)

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 Barteneff Fundamentals. Enrollment limited to 40. S/NC.
Fall TAPS1310 S01 15993 MWF 3:00-4:50(17) (A. Baryshnikov)

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 Americanists, art historians, dancers, and theatre majors.
Fall TAPS1330 S01 16009 Th 10:30-11:50(13) (J. Strandberg)
Fall TAPS1330 S01 16009 T 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.
Spr TAPS1340 S01 24859 MWF 3:00-4:50(14) (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(05) (J. Strandberg)
Fall TAPS1350 S01 15994 MW 6:00-9:50PM(05) (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(08) (J. Strandberg)
Spr TAPS1360 S01 24925 MW 6:30-9:50PM(08) (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.
Fall TAPS1370 S01 17529 S 3:00-7:00 (M. Bach-Coulibaly)
Fall TAPS1370 S01 17529 TTh 6:00-7:50 (M. Bach-Coulibaly)
Fall TAPS1370 S01 17529 M 6:15-9:30PM (M. Bach-Coulibaly)
Spr TAPS1370 S01 24861 Su 3:00-6:50(18) (M. Bach-Coulibaly)
Spr TAPS1370 S01 24861 T 6:00-9:50PM(18) (M. Bach-Coulibaly)
Spr TAPS1370 S01 24861 Th 6:00-7:50(18) (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
Fall TAPS1380 S01 24916 M 3:00-5:30(13) (S. Golub)

TAPS 1415. 13 Positions.
A lab exploring the physical, aesthetic and performative relationship of the body to a student’s cultural cosmology. We will also look at certain (so-called) traditional aspects to successful forms (a performance, a dance, a film-video, a piece of writing, a painting, sculpture…) and then attempt to break it down and reframe this tradition with a discipline (rigor) that evokes accidents and the inexplicable. A lab that examines how the creative process is thought about, considered and looked upon, watched, inside and out. A fresh outlook, (shared) labor and or proposition on how to construct/deconstruct the right/wrong/right art work.
Fall TAPS1415 S01 17518 M 3:00-5:30(15) ‘To Be Arranged’

TAPS 1425. Queer Performance.
This seminar will examine the many meanings of queer performance. We will consider queerness as it is performed in a range of aesthetic genres—theater, music, dance, performance art, digital media—as well as in everyday vernacular contexts. We will explore how the interdisciplinary academic field of queer studies has turned to performance and performativity as key modes through which gender and sexuality are expressed. The class will place a particular emphasis on queer of color, trans*-, and crip/queer approaches and cultural practices, addressing how expressed. The class will place a particular emphasis on queer of color, trans*-, and crip/queer approaches and cultural practices, addressing how expressed. The class will place a particular emphasis on queer of color, trans*-, and crip/queer approaches and cultural practices, addressing how expressed. The class will place a particular emphasis on queer of color, trans*-, and crip/queer approaches and cultural practices, addressing how expressed. The class will place a particular emphasis on queer of color, trans*-, and crip/queer approaches and cultural practices, addressing how expressed.
Fall TAPS1425 S01 17467 TTh 1:00-2:20 (L. Hilton)

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 1465. The Activist Body.
The current explosion of activist activity on and beyond college campuses has been called a “movement moment” (McCarthy, 2017), signaling an urgent need to address what it means to be a politically responsive body in the world today. This course examines activism as a topic and performance practice rooted in the body’s capacity to disrupt the political status quo. Building from the growing literature on protest and social movement in dance and performance studies, students will theorize activism and agentic embodiment, analyze cultural events that claim activist intentions, and body forth activist strategies and manifestos in weekly movement sessions.
Fall TAPS1465 S01 17295 MW 3:00-4:50(17) (S. Wilbur)

TAPS 1500H. Advanced Writing for Performance: (Re)Introduction to Playwriting.
Reading and writing plays through study and practice. We look at an array of scripts in various styles from various periods and contexts, with the aim of developing skills in reading and writing new dramatic texts. Open to writers across disciplines interested in interrogating the interface of text with live time and space, in languages of dramaturgy, and expanding personal writing practices along an axis from improvisation to careful revision. Open to graduate/undergraduate students. Prerequisite: TAPS 0100 and 0200. Enrollment limited to 15. WRIT
Fall TAPS1500H S01 17343 ‘To Be Arranged’
Spr TAPS1500H S01 25911 4:00-6:30(16) ‘To Be Arranged’

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(07) (L. Hilton)

TAPS 1790. 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.
TAPS 1791M. Digital Media and Virtual Performance (MUSC 1971).
Interested students must register for MUSC 1971.
Spr TAPS1971M S01 25875 ‘To Be Arranged’

TAPS 1900. Senior Honors Thesis Preparation.
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.

TAPS 2050. Dramaturgy.
This course will be an introduction to dramaturgy for MFA Actors, Directors and Playwrights and advanced undergraduates. The course will introduce a wide variety of play and critical approaches to dramatic texts and performances with emphasis on culturally divergent dramaturgies, embodied dramaturgy, adaptation and textual analysis for performance.
Fall TAPS2050 S01 17433 T 1:15-3:45 (P. Ybara)

TAPS 2200R. Critical Ethnography.
This graduate course introduces students to theories, practices, and critiques of critical ethnography — an approach to the study of culture which anthropologist James Clifford described as a process that “translates experiences into text”. This process of translation, although seemingly straightforward, requires layers of interpretation, selection, and the imposition of a viewpoint or politics. While ethnography is often narrowly conceived of as a methodology, this course considers ethnography as a mode of inquiry, as a philosophy, as an ongoing question and performance. We wrestle with notions of “the self” and “the other” at the intersection of imbricated cultural and performance worlds.
Fall TAPS2200R S01 17378 W 10:00-12:30 (J. Johnson)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 (C. Anderson)
Spr TAPS2300 S01 24929 Arranged (C. Anderson)

TAPS 2310. Graduate Playwriting.
With Word as the bodging 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. S/N/C

Fall TAPS2310 S01 16020 Th 12:00-3:00(10) (C. Anderson)
Spr TAPS2310 S01 24928 Th 12:00-3:00(10) (C. Anderson)

TAPS 2450. Exchange Scholar Program.
This course is open only to students of the MFA Consortium program. It will help the student incorporate text and physicality 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.

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 20th century playwrights. In addition to the works of Anton Chekhov, students may perform scenes from plays by Tennessee Williams, Arthur Miller, Clifford Odets, Wendy Wasserstein, Peter Parnell, Paula Vogel, Edward Albee and Harold Pinter.

Spr TAPS2550 S01 20158 Arranged (B. McEleney)

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 physicality 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 20161 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"
TAPS 2680. Directing: Critical Analysis.  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 direct a professional production at Trinity Rep Company.  
Spr TAPS2680 S01 20165 Arranged  (B. Mertes)

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 their acting talents. 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. McEleney)

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 dialects, 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. McEleney)

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 2790. 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 TAPS2790 S01 15040 Arranged  'To Be Arranged'
Spr TAPS2790 S01 24055 Arranged  'To Be Arranged'

TAPS 2795. Thesis Workshop.  For graduate playwrights, in their second and third years, rehearsal and revising their thesis projects. May be taken multiple times for credit. Must be taken both semesters in the third year.  

TAPS 2890. 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.  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 0400. Beyond Narnia: The Literature of C.S. Lewis.  C.S. Lewis was one of the most widely read authors of the 20th Century, yet much of his philosophical, theological and political theories are unfamiliar. His fiction and philosophical writings will be explored to better understand his perspective on modern humanity, the relationship of man to family, the community and the state. C.S. Lewis had a very clear philosophy on the importance of the individual and how he relates to the larger social structures. Morality and the role of individuals as they interface with others around them and their responsibility for working with society both at community level and at the macro-state level will be explored.  
Spr UNIV0400 S01 25996 W 3:00-5:30(14)  (T. Flanagan)
Spr UNIV0400 S02 25997 F 3:00-5:30(15)  (T. Flanagan)

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)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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
Spr URBN1200 S01 24123 MWF 11:00-11:50(04) (S. Zipp)

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. 
Spr URBN1220 S01 25679 TTh 09:00-10:20(01) (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
Fall URBN1870D S01 15115 Th 4:00-6:30(04) (R. Azar)

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 theories and 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
Fall URBN1870M S01 15318 M 3:00-5:30(15) (M. Orr)

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
Spr URBN1870N S01 25664 W 3:00-5:30(14) (S. Zipp)

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 TTh 1:00-2:20(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 URBN1870T S01 24124 Th 4:00-6:30(17) (R. Azar)

URBN 1870V. City Senses: Urbanism Beyond Visual Spectacle. Architecture and urbanism provide synesthetic experiences of space that don't necessarily privilege visual perception. This project seminar explores alternative approaches to design and an understanding of the city through explorations of all the senses. We will read philosophical ideologies and the physical experiences of the sounds of bells, traffic, and water; the smells of foods, plants, and sewers; and the feelings of light and shade. Through the identification of unconventional sensory markers, sound recordings, scent distillations, or films of different corporeal means of navigating the city, we will create a digital exhibition that consists of interactive maps of Providence. 
Fall URBN1870V S01 17582 W 3:00-5:30(17) (R. Lo)

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.

URBN 1971. Senior Honors Thesis I in Urban Studies. 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 1972. Senior Honors Thesis II in Urban Studies. 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 XLlST. Courses of Interest to Concentrators in Urban Studies.

Fall 2017
The following courses offered by other departments will fulfill Core Discipline, Seminar, and Complementary Course requirements of the Urban Studies concentration. (Please refer to the Urban Studies website to determine which requirements are fulfilled by these courses.)

Please check with the sponsoring department for times and locations.

American Studies
AMST 1611A Making America: Twentieth-Century U.S. Immigrant/Ethnic Literature

Applied Mathematics
APMA 1650 Statistical Inference I

Archaeology and Ancient World
ARCH 1150 Cities and Urban Space in the Ancient World
ARCH 1900 The Archaeology of College Hill

Cognitive, Linguistic, Psych Sciences
CLPS 0900 Quantitative Methods in Psychology

Economics
ECON 1620 Introduction to Econometrics

Education
EDUC 1100 Introduction to Qualitative Research Methods
EDUC 1430 Psychology of Race, Class, and Gender

Environmental Studies
ENVS 1400 Sustainable Design in the Built Environment

Geological Sciences
GEOG 1320 Introduction to Geographic Information Systems for Environmental Applications

History
HIST 1310 History of Brazil
HIST 1551 American Urban History, 1870-1965

Public Health
PHP 1501 Essential of Data Analysis

Public Policy
PLCY 1910 Social Entrepreneurship

Russian
RUSS 1440 Imaging Moscow: Utopia and Urban Spaces in 20th-Century Russian Culture

Sociology
SOC 1100 Introductory Statistics for Social Research
SOC 1270 Race, Class, and Ethnicity in the Modern World
SOC 1340 Principles and Methods of Geographic Information Systems

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.

Fall 2017
Fall VISA0100 S01 16401 MW 10:00-11:50(04) (L. Monge)
Fall VISA0100 S02 16402 MW 1:00-2:50(04) (L. Correa-Carlo)
Fall VISA0100 S03 16403 TTh 9:00-12:50(04) (J. Stanley)
Fall VISA0100 S04 16404 Th 9:00-12:50(04) (M. Reed)
Fall VISA0100 S05 16408 MW 4:00-5:50(04) (K. Koli)
Fall VISA0100 S06 16409 MW 7:00-8:50PM(04) (K. Koli)
Spr VISA0100 S01 25106 MW 10:00-11:50(03) (J. Stanley)
Spr VISA0100 S02 25107 MW 1:00-2:50(07) (J. Stanley)
Spr VISA0100 S03 25108 TTh 10:00-11:50(03) (L. Monge)
Spr VISA0100 S04 25109 MW 4:00-5:50(17) (L. Correa-Carlo)
Spr VISA0100 S06 25948 F 1:00-4:50 (M. Reed)

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 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.

Fall 2017
Fall VISA0120 S01 16416 TTh 10:00-11:50(13) (E. Osborn)
Spr VISA0120 S02 25116 MW 10:00-11:50(03) (E. Osborn)

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.

Fall 2017
Fall VISA0130 S02 16413 TTh 9:00-10:50(08) (P. Myoda)
Spr VISA0130 S01 25115 MW 1:00-2:50(07) (L. Correa-Carlo)

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.

Fall 2017
Fall VISA0140 S01 16414 M 9:00-12:50(01) (T. Ganz)

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.

Fall 2017
Fall VISA0150 S01 16458 Th 6:00-9:50PM(04) (V. Charlesworth)
Fall VISA0150 S02 16497 F 10:00-1:50(04) (V. Charlesworth)
Spr VISA0150 S01 25123 TTh 6:00-9:50PM(18) 'To Be Arranged'
Spr VISA0150 S02 25124 F 10:00-1:50(03) 'To Be Arranged'

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. Pre-requisite: 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.

Spr VISA1110 S01 25118 TTh 1:00-4:50(11) (A. Evans)

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. Pre-requisite: 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.

Fall VISA1120 S01 16760 MW 1:00-4:50(17) 'To Be Arranged'

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. Pre-requisite: VISA 0100.

Spr VISA1210A S01 25117 TTh 1:00-4:50(11) (L. Bostron)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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.
Fall VISA1240 S01 16420 MW 1:00-4:50(17) (E. Mena-Landry)

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 printed 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.
Spr VISA1250 S01 25119 MW 1:00-4:50(07) (E. Mena-Landry)

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.
Fall VISA1310 S01 16421 MW 1:00-4:50(17) (A. Evans)
Fall VISA1310 S02 16423 TTh 1:00-4:50(03) (L. Bostrom)
Spr VISA1310 S01 25128 TTh 1:00-3:50(11) (L. Tarentino)

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.
Fall VISA1410 S01 16424 TTh 12:00-3:50(03) (P. Myoda)

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.
Spr VISA1420 S01 25129 TTh 12:00-3:50(16) (P. Myoda)

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 35mm film camera from the Dept.
Spr VISA1510 S01 25133 MW 9:00-11:50(02) (T. Ganz)

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.
Fall VISA1520 S01 16426 TTh 1:00-4:50(03) (R. Ross)
Spr VISA1520 S01 25134 MW 1:00-3:50(07) (T. Ganz)

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.
Spr VISA1710 S01 25132 MW 1:00-4:50(13) (E. Osborn)

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.
Fall VISA1730 S01 16447 TTh 1:00-4:50(03) (E. Osborn)

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
Fall VISA1800C S01 16451 TTh 9:00-12:50(08) (T. Ganz)

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
Spr VISA1800P S01 25135 F 1:00-4:50(07) "To Be Arranged"

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.
Section numbers vary by instructor.
VISA 2450. Exchange Scholar Program.
VISA XLIST. Courses of Interest to Visual Arts Concentrators.
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 0090 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 idea 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AMST 1700B</td>
<td>Death and Dying in America</td>
</tr>
</tbody>
</table>

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

American Studies at Brown is concerned with four broad themes:

- **Social Structures and the Practices of Identity:** How do communities and individuals come to define themselves, and how do others define them, in terms of, among other categories, nation, region, class, race, ethnicity, gender, sex, religion, age and sexuality? How do organizations and institutions function socially and culturally? What are the roles of social movements, economic structures, politics and government?

- **Space and Place:** How is space organized, and how do people make place? This includes the study of natural and built environments; local, regional, national and transnational communities; and international and inter-regional flows of people, goods, and ideas.

- **Production and Consumption of Culture:** 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?

- **Science, Technology, and Everyday Life:** How does work and the deployment of science and technology shape American culture? How do everyday social practices of work, leisure and consumption provide agency for people?

**HOW we study**

American Studies at Brown emphasizes four intersecting approaches that are critical tools for understanding these themes:

- **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 structured and reflective participation in a local community or communities or the application of general theoretical knowledge to understanding social issues.
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</th>
<th>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>
<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 biological anthropology/archaeology classes:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0310</td>
<td>Human Evolution</td>
</tr>
<tr>
<td>ANTH 0500</td>
<td>Past Forward: Discovering Anthropological Archaeology</td>
</tr>
</tbody>
</table>

Select one of the following, normally taken in junior or sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>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) - 1

Five additional Anthropology courses - 5

Total Credits - 9

Of the required courses, at least five courses counted toward the concentration must be offered at the 1000-level or above and one course must be on a particular world area.

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>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td></td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0100</td>
<td></td>
<td>Introductory Calculus, Part II</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one course in programming from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td>2</td>
</tr>
<tr>
<td>APMA 0360</td>
<td>Applied Partial Differential Equations I</td>
<td></td>
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</tbody>
</table>

Five additional courses of which four should be chosen from the 1000-level courses taught by the Division of Applied Mathematics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APMA 0340</td>
<td></td>
<td></td>
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</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Concentrators are urged to complete their introductory programming course before the end of their sophomore year.

**Standard program for the Sc.B. degree.**

**Program**

Eighteen approved semester courses in mathematics, applied mathematics, engineering, the natural or social sciences. These classes must include:

- MATH 0090 Introductory Calculus, Part I 2
- MATH 1000 and Introductory Calculus, Part II 2
- MATH 0180 Intermediate Calculus 1
- MATH 0520 Linear Algebra 2
- APMA 0035 and Applied Ordinary Differential Equations 2
- APMA 0360 and Applied Partial Differential Equations 1
- Select one senior seminar from the APMA 1930 or APMA 1940 series, or an approved equivalent.
- Select one course on programming from the following: 4
  - APMA 0090 Introduction to Mathematical Modeling
  - APMA 0160 Introduction to Scientific Computing
  - CSCI 0040 Introduction to Scientific Computing and Problem Solving
  - CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
  - CSCI 0170 Computer Science: An Integrated Introduction

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.

**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. 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.

- MATH 0090 Introductory Calculus, Part I 1
- MATH 0100 Introductory Calculus, Part II 1
- or MATH 0170 Advanced Placement Calculus 1
- MATH 0180 Intermediate Calculus (or equivalent placement) 1
- MATH 0520 Linear Algebra 2
- or MATH 0540 Honors Linear Algebra 1
- CHEM 0330 Equilibrium, Rate, and Structure 1
- PHYS 0030 Basic Physics 1
- or PHYS 0050 Foundations of Mechanics 1
- Select one of the following sequences: 2
  - APMA 0350 and Applied Ordinary Differential Equations I
  - APMA 0360 and Applied Partial Differential Equations I
  - APMA 0330 Methods of Applied Mathematics I, II
  - APMA 0340 and Methods of Applied Mathematics I, II
  - APMA 1650 Statistical Inference I
  - or APMA 1655 Statistical Inference I
  - APMA 1070 Quantitative Models of Biological Systems 1
  - APMA 1080 Inference in Genomics and Molecular Biology 1
  - BIOL 0200 The Foundation of Living Systems (or equivalent) 1

**Additional Courses**

In addition to required courses listed above, students must take the following:

- Two additional courses in Applied Math or Biology. At least one of these must be a directed research course, e.g. a senior seminar or independent study in Applied Math or a directed research/independent study in Biology. For example: 1
  - A course from the APMA 1930 series
  - A course from the APMA 1940 series
  - APMA 1970 Independent Study
  - BIOL 1950 Directed Research/Independent Study
  - BIOL 1960 Directed Research/Independent Study

We strongly recommend that Applied Mathematics-Biology concentrators take one of the following programming courses on or before their first semester as a concentrator:

- APMA 0160, CSCI 0040, CSCI 0150, CSCI 0170, CSCI 0190, CLPS 0950. Those who do can use it as their second Applied Math or Biology course.

Four classes in the biological sciences agreed upon by the student and advisor. These four courses should form a cohesive grouping in a specific area of emphasis, at least two of which should be at the 1000-level. Some example groupings are below:

**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 courses must be approved by the concentration advisor.

**Biochemistry**

- BIOL 0280 Biochemistry
- BIOL 1270 Advanced Biochemistry
- CHEM 0350/0360 Organic Chemistry
- CHEM 1230 Chemical Biology
- Biotechnology and Physiology
- BIOL 0800 Principles of Physiology

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
and/or appropriate bioengineering courses, such as:

- BIOL 1100: Cell Physiology and Biophysics
- BIOL 1090: Polymer Science for Biomaterials
- BIOL 1120: Biometrics
- BIOL 1140: Tissue Engineering
- 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 1970 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 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 and 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: Introductory Calculus, Part I
- MATH 0100: 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

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

<table>
<thead>
<tr>
<th>CSCI 1010</th>
<th>Theory of Computation</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

Standard Program for the A.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 |
| 2 |

Select one of the following:

| APMA 0160 | Introduction to Scientific Computing (preferred) |
| APMA 0040 | Introduction to Scientific Computing and Problem Solving (preferred) |
| CSCI 0150 | Introduction to Object-Oriented Programming and Computer Science |
| CSCI 170 | Computer Science: An Integrated Introduction |

Select one of the following:

| APMA 1200 | Operations Research: Probabilistic Models |
| APMA 1210 | Operations Research: Deterministic Models |
| APMA 1650 or APMA 1655 | Statistical Inference I |
| 1 |

(b) 1

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:

| ECON 1130 | Intermediate Microeconomics (Mathematical) |
| 1 |

| ECON 1210 | Intermediate Macroeconomics |

| ECON 1630 | Econometrics I |
| 1 |

Two 1000-level courses from the "mathematical-economics" group:

| 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 |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ECON 1860 The Theory of General Equilibrium
ECON 1870 Game Theory and Applications to Economics

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
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 1

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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
</tr>
</tbody>
</table>

**Course Requirements:**

**Applied Mathematics Requirements**

(a) 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
</tr>
<tr>
<td>&amp; APMA 0360</td>
<td>Applied Partial Differential Equations</td>
</tr>
</tbody>
</table>

Select one of the following: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0160</td>
<td>Introduction to Scientific Computing (preferred)</td>
</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving (preferred)</td>
</tr>
<tr>
<td>CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
</tr>
<tr>
<td>CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
</tr>
</tbody>
</table>

Select one of the following: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 1200</td>
<td>Operations Research: Probabilistic Models</td>
</tr>
<tr>
<td>APMA 1210</td>
<td>Operations Research: Deterministic Models</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
<tr>
<td>or APMA 1655</td>
<td>Statistical Inference I</td>
</tr>
</tbody>
</table>

(b) 1

Select two of the following: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 1200</td>
<td>Operations Research: Probabilistic Models</td>
</tr>
<tr>
<td>APMA 1210</td>
<td>Operations Research: Deterministic Models</td>
</tr>
<tr>
<td>APMA 1660</td>
<td>Statistical Inference II</td>
</tr>
<tr>
<td>APMA 1670</td>
<td>Statistical Analysis of Time Series</td>
</tr>
<tr>
<td>APMA 1680</td>
<td>Nonparametric Statistics</td>
</tr>
<tr>
<td>APMA 1690</td>
<td>Computational Probability and Statistics</td>
</tr>
<tr>
<td>APMA 1700</td>
<td>The Mathematics of Insurance</td>
</tr>
<tr>
<td>APMA 1740</td>
<td>Recent Applications of Probability and Statistics</td>
</tr>
<tr>
<td>MATH 1010</td>
<td>Analysis: Functions of One Variable</td>
</tr>
</tbody>
</table>

**Economics Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>Econometrics I</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 1810</td>
<td>Economics and Psychology</td>
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<tr>
<td>ECON 1820</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>ECON 1850</td>
<td>Theory of Economic Growth</td>
</tr>
<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>

One 1000-level course from the "data methods" group: 4 1

<table>
<thead>
<tr>
<th>Course</th>
<th>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>
</tr>
<tr>
<td>ECON 1530</td>
<td>Health, Hunger and the Household in Developing Countries</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 1750</td>
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<td>The Theory of General Equilibrium</td>
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<tr>
<td>ECON 1870</td>
<td>Game Theory and Applications to Economics</td>
</tr>
</tbody>
</table>

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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
</tr>
</tbody>
</table>

**Course Requirements:**

**Applied Mathematics Requirements**

(a)


APMA 0350 & APMA 0360
Applied Ordinary Differential Equations and Applied Partial Differential Equations

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
APMA 1200 Operations Research: Probabilistic Models
APMA 1650 Statistical Inference I
or APMA 1655 Statistical Inference I

(b)
Select one of the following:

APMA 1180 Introduction to Numerical Solution of Differential Equations
APMA 1330 Applied Partial Differential Equations II
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 1720 Monte Carlo Simulation with Applications to Finance (preferred)
APMA 1740 Recent Applications of Probability and Statistics
MATH 1010 Analysis: Functions of One Variable

Economics Requirements:

ECON 1130 Intermediate Microeconomics (Mathematical)
ECON 1210 Intermediate Macroeconomics
ECON 1630 Econometrics I

Select two 1000-level courses from the "financial economics" group: 2

ECON 1650 Financial Econometrics
ECON 1710 Investments I
ECON 1720 Corporate Finance
ECON 1730 Venture Capital, Private Equity, and Entrepreneurship
ECON 1750 Investments II
ECON 1759 Data, Statistics, Finance
ECON 1760 Financial Institutions
ECON 1765 Finance, Regulation, and the Economy: Research
ECON 1770 Fixed Income Securities
ECON 1780 Corporate Strategy
ECON 1790 Corporate Governance and Management

Select one 1000-level course from the "mathematical economics" group: 1

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

Select one 1000-level course from the "data methods" group: 2

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

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:
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

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
APMA 1200 Operations Research: Probabilistic Models
APMA 1650 Statistical Inference I
or APMA 1655 Statistical Inference I

(b)
Select two of the following:

APMA 1180 Introduction to Numerical Solution of Differential Equations
APMA 1330 Applied Partial Differential Equations II
APMA 1660 Statistical Inference II
APMA 1670 Statistical Analysis of Time Series

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:

- APMA 1680: Nonparametric Statistics
- APMA 1690: Computational Probability and Statistics
- APMA 1700: The Mathematics of Insurance
- APMA 1720: Monte Carlo Simulation with Applications to Finance (preferred)
- APMA 1740: Recent Applications of Probability and Statistics
- MATH 1010: Analysis: Functions of One Variable

**Economics Requirements:**

- ECON 1130: Intermediate Microeconomics (Mathematical) 1
- ECON 1210: Intermediate Macroeconomics 1
- ECON 1630: Econometrics I 1

Select three 1000-level courses from the "financial economics" group:

- ECON 1650: Financial Econometrics
- ECON 1710: Investments I
- ECON 1720: Corporate Finance
- ECON 1730: Venture Capital, Private Equity, and Entrepreneurship
- ECON 1750: Investments II
- ECON 1759: Data, Statistics, Finance
- ECON 1760: Financial Institutions
- ECON 1765: Finance, Regulation, and the Economy: Research
- ECON 1770: Fixed Income Securities
- ECON 1780: Corporate Strategy
- ECON 1790: Corporate Governance and Management

Select two 1000-level courses from the "mathematical economics" group:

- 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

Select one 1000-level course from the "data methods" group:

- 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

**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.

**Archeology and the Ancient World**

The concentration in Archeology 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 Archeology 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 ‘classics’ 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>Track</th>
<th>Requirement</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology and the Ancient World</td>
<td>Four Core Requirements: two introductory courses providing an overview of archaeology’s two central aspects (field methodologies, and art history); and two introductory courses in the core geographical focus of the Joukowsky Institute (Classical/Mediterranean archaeology and Egyptian/Near Eastern archaeology).</td>
<td>ARCH 0100 Field Archaeology in the Ancient World</td>
</tr>
<tr>
<td>Classical Archaeology</td>
<td>As above, for those interested in the ‘classics’ civilizations of the Mediterranean (especially Greece and Rome).</td>
<td>ARCH 1900 The Archaeology of College Hill</td>
</tr>
<tr>
<td>Egyptian and Near Eastern Archaeology</td>
<td>As above, for those interested in the cultures of Egypt and the ancient ‘Near East’ – Anatolia, the Levant, Mesopotamia – from prehistoric through Islamic times.</td>
<td>ARCH 0030 Art in Antiquity: An Introduction</td>
</tr>
</tbody>
</table>

### Track Requirements:

In addition to the Core Requirements above, each of the three tracks requires six additional courses, which allow students to define their own areas of geographic and/or topical specialty.

<table>
<thead>
<tr>
<th>Track</th>
<th>Requirement</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology and the Ancient World</td>
<td>Six additional courses, which allow students to define their own areas of geographic and/or topical specialty.</td>
<td>ARCH 0315 Heritage In and Out of Context: Museum and Archaeological Heritage</td>
</tr>
<tr>
<td>Classical Archaeology</td>
<td>Two non-ARCH courses which EITHER relate to the study of the ancient world OR to the discipline of archaeology.</td>
<td>CLAS 1210 Mediterranean Culture Wars: Archaic Greek History, c. 1200 to 479 BC</td>
</tr>
<tr>
<td>Egyptian and Near Eastern Archaeology</td>
<td>Two non-ARCH courses which EITHER relate to the study of the ancient world OR to the discipline of archaeology.</td>
<td>CLAS 1310 Roman History I: The Rise and Fall of an Imperial Republic</td>
</tr>
</tbody>
</table>
Two courses in Egyptian and Near Eastern archaeology and art at the 1000 level (or above). 2
Two terms of course work in a pertinent ancient language (such as Akkadian, Coptic, Classical Hebrew, Middle Egyptian). 2
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>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 0335</td>
<td>Archaeology of the Andes</td>
</tr>
<tr>
<td>ARCH 1170</td>
<td>Community Archaeology in Providence and Beyond</td>
</tr>
</tbody>
</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 at least 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.

**TOTAL (including Core and Track Requirements):** 10

1. **All formally cross-listed courses, regardless of home department, can be considered ARCH courses and can fulfill the relevant concentration requirement(s). There is no limit on the number of cross-listed courses that can count toward the completion of a concentration.**
2. **Students who are doing a double concentration are allowed up to two courses that are also counted toward (i.e., overlap with) their second concentration to fulfill Archaeology concentration requirements.**

**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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIAA 0001</td>
<td>Architectural Design</td>
</tr>
<tr>
<td>HIAA 0002</td>
<td>Advanced Design Studio</td>
</tr>
</tbody>
</table>

**Six Core Requirements:** 6

Select Four (4) Courses from RISD: Students will take the courses at the Rhode Island School of Design but will register at Brown.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIAA 0003</td>
<td>Architectural Projection</td>
</tr>
<tr>
<td>HIAA 0004</td>
<td>Architectural Analysis</td>
</tr>
<tr>
<td>HIAA 0005</td>
<td>Structural Analysis</td>
</tr>
<tr>
<td>HIAA 0006</td>
<td>Wood Structures</td>
</tr>
<tr>
<td>HIAA 0007</td>
<td>Environmental Design II</td>
</tr>
</tbody>
</table>

Select Two (2) Courses from Brown:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIAA 0010</td>
<td>A Global History of Art and Architecture</td>
</tr>
<tr>
<td>HIAA 0042</td>
<td>Islamic Art and Architecture</td>
</tr>
<tr>
<td>HIAA 0081</td>
<td>Architecture of the House Through Space and Time</td>
</tr>
<tr>
<td>HIAA 0770</td>
<td>Architecture and Urbanism of the African Diaspora</td>
</tr>
<tr>
<td>HIAA 0850</td>
<td>Modern Architecture</td>
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</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>VISA 1210K</td>
<td>Sculpture II: Conceptual Propositions</td>
</tr>
<tr>
<td>VISA 0100</td>
<td>Studio Foundation</td>
</tr>
<tr>
<td>VISA 1210K</td>
<td>Digital Printmaking</td>
</tr>
<tr>
<td>VISA 1420</td>
<td>Experiments in Modern Physics</td>
</tr>
<tr>
<td>VISA 1240</td>
<td>Introduction to Classical Mechanics</td>
</tr>
<tr>
<td>VISA 1270</td>
<td>Introduction to Relativity and Quantum Physics</td>
</tr>
<tr>
<td>VISA 1400</td>
<td>Principles and Methods of Geographic Information Systems</td>
</tr>
<tr>
<td>VISA 1710</td>
<td>Principles and Methods of Geographic Information Systems</td>
</tr>
<tr>
<td>VISA 1870C</td>
<td>The Environment: Urban Environmental History and Urban Environmentalism for the 21st Century</td>
</tr>
</tbody>
</table>

**Undergraduate Concentrations**

<table>
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<td>Environmentalism for the 21st Century</td>
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<tr>
<td>Environmental History and Urban</td>
</tr>
<tr>
<td>The Environment Built: Urban Environmental History and Urban</td>
</tr>
<tr>
<td>Environmentalism for the 21st Century</td>
</tr>
<tr>
<td>Sustainable Design in the Built Environment</td>
</tr>
<tr>
<td>Environmental Stewardship</td>
</tr>
<tr>
<td>Renewable Energy Technologies</td>
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<tr>
<td>Electrical Energy Engineers</td>
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<tr>
<td>Electrical Power Distribution Systems</td>
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**Honors**

For students in the concentration who intend to go to architecture school afterwards, typically their design project in their double credit second RISDstudio 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 1
- PHYS 0160 Introduction to Relativity and Quantum Physics 1
- PHYS 0270 Introduction to Astronomy 1

Select one of the following Series:

- MATH 0170 Advanced Placement Calculus & MATH 0180 Advanced Placement Calculus (Physics/Engineering) 1-2
- MATH 0190 Advanced Placement Calculus (Physics/Engineering) 1-2
- MATH 0200 Intermediate Calculus (Physics/Engineering) 1-2
- MATH 0350 Honors Calculus (or equivalent) 1
- PHYS 0470 Electricity and Magnetism 1

**Program**

Select one of the following mathematics courses:

- MATH 0520 Linear Algebra 1
- MATH 0540 Honors Linear Algebra 1
- PHYS 0720 Methods of Mathematical Physics 1
- APMA 0330 Methods of Applied Mathematics I, II 1
- APMA 0340 Methods of Applied Mathematics I, II 1

Select two of the following astrophysics courses:

- PHYS 1100 Introduction to General Relativity 1
- PHYS 1250 Stellar Structure and the Interstellar Medium 1
- PHYS 1270 Extragalactic Astronomy and High-Energy Astrophysics 1
- PHYS 1280 Introduction to Cosmology 1

Three additional 1000- or 2000-level courses in physics or a related field, suggestions:

- APMA 1670 Statistical Analysis of Time Series 3
- ENGL 1860 Advanced Fluid Mechanics 3
- GEOL 0810 Planetary Geology 3
- GEOL 1810 Physics of Planetary Evolution 3
- MATH 1060 Differential Geometry 3
- PHYS 0500 Advanced Classical Mechanics 3
- PHYS 0560 Experiments in Modern Physics 3

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) 1 3

Two courses in physics, typically: 1 2

| PHYS 0030 | Basic Physics |
| PHYS 0050 | Foundations of Mechanics |
| ENGN 0030 | Introduction to Engineering |

PHYS 0040 Basic Physics
or PHYS 0060 Foundations of Electromagnetism and Modern Physics
or ENGN 0040 Dynamics and Vibrations

Three courses in physical and organic chemistry: 3

| CHEM 0330 | Equilibrium, Rate, and Structure |
| CHEM 0350/0360 | Organic Chemistry |

One course in biophysical or related chemistry: 1

| CHEM 0400 | Biophysical and Bioinorganic Chemistry |
| CHEM 0500 | Inorganic Chemistry |
| CHEM 1660 | Instrumental Analysis with Environmental Applications |

-or-

| GEOL 1660 | Instrumental Analysis with Environmental Applications |

Three courses in biochemistry: 3

| BIOL 0280 | Biochemistry |
| BIOL 1270 | Advanced Biochemistry |
| CHEM 1230 | Chemical Biology |
| CHEM 1240 | Biochemistry |

Select two semester courses of independent research approved by a concentration advisor: 2

| BIOI 1950/1960 | Directed Research/Independent Study |

Note that the mathematics and physics requirements may be satisfied by Advanced Placement credit.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
2 or any NEUR course in Cell, Genetics, Molecular Biology, or Development.

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>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>MATH 0090</td>
<td>Introductory Calculus, Part I (or placement. MATH 0050/MATH 0060 may be substituted for MATH 0090.)</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<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>
<tr>
<td>Or a statistics course, to be approved by the concentration advisor.</td>
<td></td>
</tr>
</tbody>
</table>

**Ten Core Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</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>
<tr>
<td>BIOL 0280</td>
<td>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>
<tr>
<td>BIOL 0530</td>
<td>Principles of Immunology</td>
</tr>
<tr>
<td>BIOL 1050</td>
<td>Biology of the Eukaryotic Cell</td>
</tr>
<tr>
<td>BIOL 1310</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>NEUR 1020</td>
<td>Principles of Neurobiology</td>
</tr>
</tbody>
</table>

**Area 2 (Structure/Function)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</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>Title</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.

**Honor:** 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/.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I (or placement. MATH 0050/MATH 0060 may be substituted for MATH 0090)</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
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<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
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<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or IB credit)</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
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<td>CHEM 0360</td>
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<tr>
<td>or BIOL 0280</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>PHYS 0030</td>
<td>Basic Physics (or equivalent. PHYS 0050 or ENGR 0030 may be substituted for PHYS 0030.)</td>
</tr>
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<td>PHYS 0040</td>
<td>Basic Physics (or equivalent. PHYS 0060 or ENGR 0040 may be substituted for PHYS 0040.)</td>
</tr>
</tbody>
</table>

Core Courses:

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<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or placement)</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>
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<tr>
<td>BIOL 0280</td>
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<td>Biology of Reproduction</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 0370 - Experimental Evolution</td>
<td></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 1680</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>

Five additional courses chosen from BIOL and/or NEUR offerings for concentrators. Alternatively, students may 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 0100 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</th>
<th>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 or NEUR 0010</td>
<td>The Foundation of Living Systems</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 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>2</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 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</th>
<th>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>

3. Three Additional upper Level Biomedical Engineering Courses

Select at least one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1140</td>
<td>Tissue Engineering</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1220</td>
<td>Neuroengineering</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1400</td>
<td>Analytical Methods in Biomaterials</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1930B</td>
<td>Biomedical Optics</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1930R</td>
<td>Molecular and Cell Biology for Engineers</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 2910S</td>
<td>Cancer Nanotechnology</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Select at most two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1150</td>
<td>Stem Cell Engineering</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 1210</td>
<td>Synthetic Biological Systems</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 1800</td>
<td>Animal Locomotion</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 2110</td>
<td>Drug and Gene Delivery</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 2130</td>
<td>Techniques in Molecular and Cell Science</td>
<td>1</td>
</tr>
</tbody>
</table>

5. Capstone Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1930L</td>
<td>Biomedical Engineering Design, Research and Modeling</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. Students with advanced Biology backgrounds may replace with BIOL 0470, BIOL 0530, or other Biology courses.
2. Students with advanced math backgrounds may replace with CHEM 0360.
3. Or other advanced bioengineering courses (e.g., ENGN 1510 and ENGN 1520), subject to concentration advisor approval.
4. Or other advanced bioengineering courses, subject to concentration advisor approval.
5. Biomedical engineering students are also encouraged to pursue independent research with faculty members in the School of Engineering or the Division of Biology & Medicine.

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:

<table>
<thead>
<tr>
<th>Series</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</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 0070 &amp; PHYS 0160</td>
<td>Analytical Mechanics and Introduction to Relativity and Quantum Physics</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</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>
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:

**Cell Biology**
- BIOL 0500 Cell and Molecular Biology
- BIOL 1050 Biology of the Eukaryotic Cell
- BIOL 1200 Protein Biophysics and Structure

**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

**Biotechnology**
- 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:

**Biology**
- BIOL 0280 Biochemistry
- BIOL 0470 Genetics
- BIOL 0800 Principles of Physiology
- BIOL 1190 Synthetic Transmission and Plasticity

**Physics**
- PHYS 0500 Advanced Classical Mechanics
- PHYS 0560 Experiments in Modern Physics
- PHYS 1410 Quantum Mechanics A
- PHYS 1420 Quantum Mechanics B
- PHYS 1610 Biological Physics

**Mathematics**
- MATH 0520 Linear Algebra

**Applied Mathematics**
- 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 I

**Chemistry**
- CHEM 1230 Chemical Biology
- CHEM 1450 Advanced Organic Chemistry

A course from the CHEM 1560 series. Select at least one semester (two are recommended) of Directed Research

**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**
*(Effective beginning with the graduating class of 2021)*

**Foundation Requirements** (foundation requirements must be completed before taking the capstone in fall of senior year)

- ECON 0110 Principles of Economics 1
- ECON 1110 Intermediate Microeconomics 1
- SOC 1311 Micro-Organizational Theory: Social Behavior in Organizations 1
- SOC 1315 Macro-Organizational Theory: Organizations in Social Context 1
- ENGN 0020 Transforming Society-Technology and Choices for the Future or ENGN 0030 Introduction to Engineering 1
- ENGN 1010 The Entrepreneurial Process: Innovation in Practice 1

**Math and Statistics Requirements**

- MATH 0100 Introductory Calculus, Part II or MATH 0170 Advanced Placement Calculus or ECON 0170 Essential Mathematics for Economics 1
- Or AP BC Calculus score of 4 or higher or IB High-level Math minimum score of 5 (IB Standard-level not accepted)
- ECON 1620 Introduction to Econometrics 1

**Track Requirements**

- ECON 0710 Financial Accounting 1
- ECON 1210 Intermediate Macroeconomics 1

For up-to-date course information please visit Courses@Brown.edu (https://www.brown.edu/).
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  
ECON 1355 Environmental Issues in Development Economics  
ECON 1360 Health Economics  
ECON 1375 Inequality of Opportunity in the US  
ECON 1400 The Economics of Mass Media  
ECON 1420 Urbanization in China  
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 1660 Big Data  
ECON 1759 Data, Statistics, Finance  
ECON 1765 Finance, Regulation, and the Economy: Research  

One 1000-level economics course, including a second data methods intensive course from the list above  
Capstone: one-semester required (must be taken fall of senior year)  
BEO 1930C BEO Capstone I: Business Economics Track  

Total Credits 15  

(Effective for graduating classes through 2020)  

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  
ECON 1355 Environmental Issues in Development Economics  
ECON 1360 Health Economics  
ECON 1375 Inequality of Opportunity in the US  
ECON 1400 The Economics of Mass Media  
ECON 1420 Urbanization in China  
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 1660 Big Data  
ECON 1759 Data, Statistics, Finance  
ECON 1765 Finance, Regulation, and the Economy: Research  

Organizational Studies Track  
(Effective beginning with the graduating class of 2021)  

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 0100 Introductory Calculus, Part II  
or MATH 0170 Advanced Placement Calculus  
or ECON 0170 Essential Mathematics for Economics  
Or AP BC Calculus with a score of 4 or higher  
Or IB High-level Math with a minimum score of 5 (IB Standard-level is not accepted)  
SOC 1100 Introductory Statistics for Social Research  
or APMA 0650 Essential Statistics  
or ECON 1620 Introduction to Econometrics  

Track Requirements  
One Introduction to Research Methods course (selected from the following):  
SOC 1020 Methods of Social Research  
SOC 1050 Methods of Research in Organizations  

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Two Organization-Relevant Electives (OREs) (the following are approved examples—please consult with the CAB/BEO website for current offerings):

ORE courses allow students to deepen and/or broaden their exposure to topics and settings that are either strongly determined by, or strongly determining of, organizational activities and outcomes. To qualify for this list, a course should have a clear linkage to commerce, organizations and/or entrepreneurship, and it should incorporate organizational phenomena and perspectives into a significant portion of its coursework.

Any from the Advanced Research Methods or Advanced Organization-Studies lists; or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 1610A</td>
<td>American Advertising: History and Consequences</td>
</tr>
<tr>
<td>ECON 1760</td>
<td>Financial Institutions</td>
</tr>
<tr>
<td>EDUC 1020</td>
<td>The History of American Education</td>
</tr>
<tr>
<td>EDUC 1040</td>
<td>Sociology of Education</td>
</tr>
<tr>
<td>EDUC 1060</td>
<td>Politics and Public Education</td>
</tr>
<tr>
<td>EDUC 1150</td>
<td>Education, the Economy and School Reform</td>
</tr>
<tr>
<td>EDUC 1200</td>
<td>History of American School Reform</td>
</tr>
<tr>
<td>EDUC 1650</td>
<td>Policy Implementation in Education</td>
</tr>
<tr>
<td>EDUC 1730</td>
<td>American Higher Education in Historical Context</td>
</tr>
<tr>
<td>ENGN 1930S</td>
<td>Land Use and Built Environment: An Entrepreneurial View</td>
</tr>
<tr>
<td>ETHN 1890C</td>
<td>Business, Culture, and Globalization: An Ethnographic Perspective</td>
</tr>
<tr>
<td>PHP 2400</td>
<td>The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health</td>
</tr>
<tr>
<td>PLCY 1700R</td>
<td>Urban Revitalization: Lessons from the Providence Plan</td>
</tr>
<tr>
<td>PLCY 1701J</td>
<td>Policy Implementation</td>
</tr>
<tr>
<td>PLCY 1701K</td>
<td>Governance in the Academy: A University at Work in the 21st Century</td>
</tr>
<tr>
<td>PLCY 1701O</td>
<td>Labor Market Policy</td>
</tr>
<tr>
<td>PLCY 1701Q</td>
<td>Leading Social Ventures - Social Entrepreneurship in Action</td>
</tr>
<tr>
<td>PLCY 1800</td>
<td>Investigating Modes of Social Change</td>
</tr>
<tr>
<td>PLCY 1910</td>
<td>Social Entrepreneurship</td>
</tr>
<tr>
<td>PLCY 2150</td>
<td>Strategic Communication</td>
</tr>
<tr>
<td>PLCY 2655</td>
<td>Regulation and Compliance</td>
</tr>
<tr>
<td>POLS 1150</td>
<td>Prosperity: The Ethics and Economics of Wealth Creation</td>
</tr>
<tr>
<td>POLS 1240</td>
<td>Politics, Markets and States in Developing Countries</td>
</tr>
<tr>
<td>POLS 1820W</td>
<td>Market Liberalism: Origins, Principles and Contemporary Applications</td>
</tr>
<tr>
<td>SOC 1114</td>
<td>Law and Society</td>
</tr>
<tr>
<td>SOC 1115</td>
<td>The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People</td>
</tr>
<tr>
<td>SOC 1871C</td>
<td>Sociology of the Legal Profession</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 1730</td>
<td>Psychology in Business and Economics</td>
</tr>
<tr>
<td>ECON 1790</td>
<td>Corporate Governance and Management</td>
</tr>
<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):

ARM courses allow students to deepen and/or broaden their expertise in one or more methods of empirical inquiry.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1940</td>
<td>Ethnographic Research Methods</td>
</tr>
<tr>
<td>ECON 1390</td>
<td>Research Methods for Economists</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>Econometrics I</td>
</tr>
<tr>
<td>EDUC 1100</td>
<td>Introduction to Qualitative Research Methods</td>
</tr>
<tr>
<td>EDUC 1160</td>
<td>Evaluating the Impact of Social Programs</td>
</tr>
<tr>
<td>PHP 1320</td>
<td>Survey Research in Health Care</td>
</tr>
<tr>
<td>PLCY 1200</td>
<td>Policy Analysis and Program Evaluation</td>
</tr>
<tr>
<td>PLCY 2035</td>
<td>Statistics II for Public Policy Analysis</td>
</tr>
<tr>
<td>PLCY 2040</td>
<td>Policy Analysis and Program Evaluation</td>
</tr>
<tr>
<td>PLCY 2050</td>
<td>Program Evaluation</td>
</tr>
<tr>
<td>SOC 1117</td>
<td>Focus Groups for Market and Social Research</td>
</tr>
<tr>
<td>SOC 1118</td>
<td>Context Research for Innovation</td>
</tr>
<tr>
<td>SOC 1120</td>
<td>Market and Social Surveys</td>
</tr>
<tr>
<td>SOC 1127</td>
<td>EPIC: Ethnographic Praxis in Industry</td>
</tr>
<tr>
<td>SOC 1260</td>
<td>Market Research in Public and Private Sectors</td>
</tr>
<tr>
<td>SOC 1340</td>
<td>Principles and Methods of Geographic Information Systems</td>
</tr>
</tbody>
</table>

Capstone: two-semesters required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO 1930A</td>
<td>BEO Capstone I: Organizational Studies Track</td>
</tr>
<tr>
<td>BEO 1940A</td>
<td>and BEO Capstone II: Organizational Studies Track</td>
</tr>
</tbody>
</table>

Total Credits 15

1 If a student in the Organizational Studies track completes only the fall semester of the capstone course (BEO 1930A), she/he must take one additional ARM or AOS course.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Organizational Studies Track
(Effective for graduating classes through 2020)

Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)

- ECON 0110 Principles of Economics 1
- ECON 1110 Intermediate Microeconomics 1
- SOC 1311 Micro-Organizational Theory: Social Behavior in Organizations 1
- SOC 1315 Macro-Organizational Theory: Organizations in Social Context 1
- ENGN 0020 Transforming Society-Technology and Choices for the Future 1
- or ENGN 0030 Introduction to Engineering 1
- ENGN 1010 The Entrepreneurial Process: Innovation in Practice 1

Math and Statistics Requirements

- MATH 0090 Introductory Calculus, Part I 1
- SOC 1100 Introductory Statistics for Social Research 1
- or APMA 0650 Essential Statistics 1
- or ECON 1620 Introduction to Econometrics 1

Track Requirements

One Introduction to Research Methods course (selected from the following): 1

- SOC 1020 Methods of Social Research 1
- SOC 1050 Methods of Research in Organizations 2

Two Organization-Relevant Electives (OREs) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

ORE courses allow students to deepen and/or broaden their exposure to topics and settings that are either strongly determined by, or strongly determining of, organizational activities and outcomes. To qualify for this list, a course should have a clear linkage to commerce, organizations and/or entrepreneurship, and it should incorporate organizational phenomena and perspectives into a significant portion of its coursework.

Any from the Advanced Research Methods or Advanced Organization-Studies lists; or
- AMST 1610A American Advertising: History and Consequences 1
- ECON 1760 Financial Institutions 1
- EDUC 1020 The History of American Education 1
- EDUC 1040 Sociology of Education 1
- EDUC 1060 Politics and Public Education 1
- EDUC 1150 Education, the Economy and School Reform 1
- EDUC 1200 History of American School Reform 1
- EDUC 1650 Policy Implementation in Education 1
- EDUC 1730 American Higher Education in Historical Context 1
- ENGN 1930S Land Use and Built Environment: An Entrepreneurial View 1
- ETHN 1890C Business, Culture, and Globalization: An Ethnographic Perspective 1
- PHP 2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health 1
- PLCY 1700R Urban Revitalization: Lessons from the Providence Plan 1
- PLCY 1701J Policy Implementation 1
- PLCY 1701K Governance in the Academy: A University at Work in the 21st Century 1
- PLCY 1701O Labor Market Policy 1
- PLCY 1701Q Leading Social Ventures - Social Entrepreneurship in Action 1
- PLCY 1800 Investigating Modes of Social Change 1
- PLCY 1910 Social Entrepreneurship 1
- PLCY 2150 Strategic Communication 1
- PLCY 2655 Regulation and Compliance 1
- POLS 1150 Prosperity: The Ethics and Economics of Wealth Creation 1
- POLS 1240 Politics, Markets and States in Developing Countries 1
- POLS 1820W Market Liberalism: Origins, Principles and Contemporary Applications 1
- SOC 1114 Law and Society 1
- SOC 1115 The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People 1
- SOC 1871C Sociology of the Legal Profession 1

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 1
- ECON 1790 Corporate Governance and Management 1
- PLCY 1700V Nonprofit Organizations 1
- PLCY 1700Y Crisis Management 1
- PLCY 2020 Public Budgeting and Management 1
- PLCY 2350 Thinking, Planning and Acting Strategically 1
- PLCY 2550 Managing and Leading in Public Affairs 1
- PLCY 2700 Advanced Organizational and Management Strategies 1
- SOC 1060 Leadership in Organizations 1
- SOC 1870A Investing in Social Change 1
- SOC 1870L The Economic Foundations of Everyday Life 1
- SOC 1871O Law, Innovation and Entrepreneurship 1
- SOC 1872B Sociology of Money 1
- SOC 1872H Sociology of FIRE: Finance, Insurance, + Real Estate 1
- SOC 1872T Social Innovation and Disruption: The Case of Modern Turkey 1

One Advanced Research Methods course (ARM) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

ARM courses allow students to deepen and/or broaden their expertise in one or more methods of empirical inquiry.

- ANTH 1940 Ethnographic Research Methods 1
- ECON 1390 Research Methods for Economists 1
- ECON 1630 Econometrics I 1
- EDUC 1100 Introduction to Qualitative Research Methods 1
- EDUC 1160 Evaluating the Impact of Social Programs 1
- PHP 1320 Survey Research in Health Care 1
- PLCY 1200 Policy Analysis and Program Evaluation 1

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

1. One gateway course in Engineering or another physical science
2. Five courses that develop expertise in a technical subfield
3. 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**

1. For specific gateway and subfield courses, refer to the BEO website.

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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 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 0550</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>
<tr>
<td>Select one course in statistical mechanics:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1150</td>
<td>Physical Chemistry: Thermodynamics and Statistical Mechanics</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>
</tbody>
</table>

Seven courses, primarily at the 1000 or 2000 level, in chemistry or physics.

Select two semesters of independent study:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0970/0980</td>
<td>Undergraduate Research</td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
</tr>
</tbody>
</table>

**Honors Requirements for Chemical Physics**

All ScB Chemical Physics concentrators who completes the following requirements are candidates for Honors; no separate application is necessary.

The requirements for Honors in Chemical Physics are:

Other approved courses in applied mathematics, biology, computer science, geological sciences, or engineering may be substituted for some of the twenty-one. Students are advised to take at least six courses in the humanities and social sciences.
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 but offer areas of emphasis. Students may also pursue the A.B. degree in Chemistry, which provides a core education in the discipline.

**Chemistry Track:**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1150 Physical Chemistry: Thermodynamics and Statistical Mechanics
- CHEM 1160 Physical Chemistry Laboratory
- CHEM 0980 Undergraduate Research

**Total Credits**: 19

**Chemical Biology Track:**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 0970 Undergraduate Research
- CHEM 0980 Undergraduate Research
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1230 Chemical Biology
- CHEM 1240 Biochemistry
- BIOL 0280 Biochemistry
- MATH 0180 or equivalent
- Two Physics courses

Select three of the following:  
- BIOL 0470 Genetics
- BIOL 0500 Cell and Molecular Biology
- BIOL 0510 Introductory Microbiology
- BIOL 0530 Principles of Immunology
- BIOL 0800 Principles of Physiology
- NEUR 1020 Principles of Neurobiology

**Total Credits**: 19

**Materials Chemistry Track:**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 0970 Undergraduate Research
- CHEM 0980 Undergraduate Research
- CHEM 1060 Advanced Inorganic Chemistry
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1150 Physical Chemistry: Thermodynamics and Statistical Mechanics
- CHEM 1700 Nanoscale Materials: Synthesis and Applications
- MATH 0180 or equivalent
- Two Physics courses
- BIOL 1090 Polymer Science for Biomaterials

Five electives, at least two must be chemistry courses.

**Total Credits**: 19

*For students with a more Engineering bent, the following substitutions can be made - ENGN 0030/ENGN 0040 can be substituted for PHYS 0190; ENGN 0410 can be substituted for CHEM 1060; ENGN 0720 for CHEM 1150.

**Concentrating in Chemistry – Three tracks**

The required/recommended courses for the three tracks are given below.

**Required/recommended courses for the three tracks**

**Chemistry**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 0970 Undergraduate Research

**Total Credits**: 19

**Chemical Biology**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 0970 Undergraduate Research
- CHEM 0980 Undergraduate Research
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1230 Chemical Biology
- CHEM 1240 Biochemistry
- BIOL 0280 Biochemistry
- MATH 0180 or equivalent
- Two Physics courses

Select three of the following:  
- BIOL 0470 Genetics
- BIOL 0500 Cell and Molecular Biology
- BIOL 0510 Introductory Microbiology
- BIOL 0530 Principles of Immunology
- BIOL 0800 Principles of Physiology
- NEUR 1020 Principles of Neurobiology

**Total Credits**: 19

**Materials Chemistry**
- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Organic Chemistry
- CHEM 0360 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 0970 Undergraduate Research
- CHEM 0980 Undergraduate Research
- CHEM 1060 Advanced Inorganic Chemistry
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1150 Physical Chemistry: Thermodynamics and Statistical Mechanics
- CHEM 1700 Nanoscale Materials: Synthesis and Applications
- MATH 0180 or equivalent
- Two Physics courses
- BIOL 1090 Polymer Science for Biomaterials

Five electives, at least two must be chemistry courses.

**Total Credits**: 19

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

**Select one of the following series:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 1210</td>
<td>Mediterranean Culture Wars: Archaic Greek History, c. 1200 to 479 BC</td>
<td>2</td>
</tr>
<tr>
<td>And</td>
<td>CLAS 1220</td>
<td>The Fall of Empires and Rise of Kings: Greek History to 478 to 323 BC</td>
</tr>
<tr>
<td>OR</td>
<td>CLAS 1310</td>
<td>Roman History I: The Rise and Fall of an Imperial Republic</td>
</tr>
<tr>
<td>And</td>
<td>CLAS 1320</td>
<td>Roman History II: The Roman Empire and Its Impact</td>
</tr>
<tr>
<td>OR</td>
<td>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.**

**Total Credits**

1. Options offered in 2017/2018 include, but are not limited to: GREEK 1050G, GREEK 1060, GREEK 1080, GREEK 1100, GREEK 1100G, GREEK 1100D, GREEK 1140, GREEK 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: GREEK 2100F, GREEK 2150, and LATN 2120E.


**Greek**

Four Greek courses on the 1000-level or above, at least one of which is to be: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREEK 1810</td>
<td>Early Greek Literature or GREEK 1820</td>
<td>Fifth Century Survey</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**

1. Options offered in 2017/2018 include, but are not limited to: GREEK 1050G, GREEK 1060, GREEK 1080, GREEK 1100, GREEK 1100G, GREEK 1100D, GREEK 1140, GREEK 1820, and with instructor permission for those who are very advanced in Greek: GREEK 2100F and GREEK 2150.

2. See options listed under Classics track.

**Latin**

Four Latin courses on the 1000-level or above, at least one of which is to be: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATN 1810</td>
<td>Survey of Republican Literature or LATN 1820</td>
<td>Survey of Roman Literature II: Empire</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**

1. Options offered in 2017-2018 include, but are not limited to: LATN 1015, LATN 1100E, LATN 1110G, LATN 1110L, LATN 1110Y, LATN 1120D, LATN 1150, LATN 1810, and with instructor permission for those who are very advanced in Latin: LATN 2120E.

2. See options listed under Classics track.

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

Four Latin courses on the 1000-level or above, at least one of which is to be: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATN 1810</td>
<td>Survey of Republican Literature</td>
<td>4</td>
</tr>
<tr>
<td>or LATN 1820</td>
<td>Survey of Roman Literature II: Empire</td>
<td></td>
</tr>
</tbody>
</table>

Four Greek courses on the 1000-level or above, at least one of which is to be: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREK 1810</td>
<td>Early Greek Literature</td>
<td>4</td>
</tr>
<tr>
<td>or GREK 1820</td>
<td>Fifth Century Survey</td>
<td></td>
</tr>
</tbody>
</table>

South Asian Classics

At least one Sanskrit course above Sanskrit 0300 1

Total Credits 12

1 Options offered in 2017-2018 include, but are not limited to:
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 Latin: LATN 2120E.

Latin and Sanskrit

Four Sanskrit courses at any level 1

Four Latin courses on the 1000-level or above, at least one of which is to be: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATN 1810</td>
<td>Survey of Republican Literature</td>
<td>4</td>
</tr>
<tr>
<td>or LATN 1820</td>
<td>Survey of Roman Literature II: Empire</td>
<td></td>
</tr>
</tbody>
</table>

South Asian Classics

At least one Sanskrit course above Sanskrit 0300 1

Total Credits 6

1 Options offered in 2017-2018 include: SANS 0400, SANS 1020 and SANS 1100.

2 Options offered in 2017-2018 include: CLAS 0995 and CLAS 1140.

Sanskrit

Two Sanskrit courses at the 1000-level or above 1

Two of the Sanskrit Classics Courses in Translation 2

Total Credits 8

1 Options offered in 2017/2018 include: SANS 0400, SANS 1020 and SANS 1100.

2 Options offered in 2017/2018 include: CLAS 0995 and CLAS 1140.

Greek and Sanskrit

Four Sanskrit courses at any level 1

Four Greek courses on the 1000-level or above, at least one of which is to be: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREK 1810</td>
<td>Early Greek Literature</td>
<td>4</td>
</tr>
<tr>
<td>or GREK 1820</td>
<td>Fifth Century Survey</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 8

1 Options offered in 2017/2018 include: SANS 1020 and SANS 1100.

2 Options offered in 2017/2018 include: CLAS 0995 and CLAS 1140.

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 APMA 1650, CLPS 0900 as 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 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 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.

Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE 1

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<tr>
<td>CLPS 0900</td>
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<td>One approved course in Neuroscience, such as:</td>
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Four Approved Electives, such as: 4

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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>
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<tr>
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<td>NEUR 1540</td>
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<td>NEUR 1930A</td>
<td>Cognitive Neuroscience: Motor Learning</td>
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One Independent Study or Approved Seminar, such as: 1

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<td>CLPS 1900</td>
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Total Credits 12

Requirements for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE 1

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<td>CLPS 0400</td>
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<tr>
<td>CLPS 0450</td>
<td>Brain Damage and the Mind</td>
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</tr>
<tr>
<td>One approved course in Neuroscience, such as:</td>
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<tr>
<td>One approved course in Cognitive Neuropsychology, such as:</td>
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<tr>
<td>CLPS 1420</td>
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<tr>
<td>One approved course in Computational Methods, such as:</td>
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<td>CLPS 0950</td>
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</tr>
<tr>
<td>CLPS 1291</td>
<td>Computational Methods for Mind, Brain and Behavior</td>
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</table>

Additional Courses

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

Brown University
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 these 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 requires 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
Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE

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<th>Course Code</th>
<th>Course Title</th>
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<td>CLPS 0100</td>
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<td>CLPS 0900</td>
<td>Statistical Methods</td>
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<tr>
<td>CLPS 0220</td>
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<tr>
<td>CLPS 0500</td>
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<td>CLPS 0800</td>
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<td>One approved course in Computational Methods, such as:</td>
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<td>CSCI 1010</td>
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<td>CSCI 1480</td>
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<td>ENGN 1580</td>
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<td>PHIL 1770</td>
<td>Philosophy of Mind</td>
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<tr>
<td>CLPS 1400</td>
<td>The Neural Bases of Cognition</td>
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<td>CLPS 1495</td>
<td>Affective Neuroscience</td>
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<tr>
<td>CLPS 1560</td>
<td>Visually-Guided Action and Cognitive Processes</td>
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<tr>
<td>CLPS 1900</td>
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Total Credits: 12

Requirements for the Sc.B. degree

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<td>CLPS 0900</td>
<td>Statistical Methods</td>
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Total Credits: 17

1 For the current list of approved course in all categories, see the CLPS Cognitive Science page.

Comparative Literature

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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 D (stephanie.merrim@brown.edu) or Dore Levy
dore.levy@brown.edu for 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:
  - 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.
  - ONE COURSE chiefly devoted to EACH of the three major literary
    genres: poetry, drama and narrative.
  - 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:
  - 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.
  - ONE COURSE chiefly devoted to EACH of the three major literary
    genres: poetry, drama and narrative.
  - 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.
- TEN advanced literature courses (generally 1000-level courses),
including Comparative Literature 1210 and:
  - 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.
  - ONE COURSE chiefly devoted to EACH of the three major literary
    genres: poetry, drama and narrative.
  - 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
required courses listed above. Successful completion of the thesis
constitutes Honors. (See Guidelines for Honors Theses).

For additional information, please visit the Comparative Literature
website (http://www.brown.edu/Departments/Comparative_Literature/) or
see the Director of Undergraduate Studies, Professor Dore Levy.

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

<table>
<thead>
<tr>
<th>Prerequisites:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
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<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
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<table>
<thead>
<tr>
<th>General Core Requirements: Biology</th>
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<tbody>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
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<tr>
<td>BIOL 0280</td>
<td>Biochemistry</td>
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</table>

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

<table>
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<tbody>
<tr>
<td>CHEM 0330</td>
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<tr>
<td>Equilibrium, Rate, and Structure</td>
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</tr>
<tr>
<td>or CHEM 0350</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry</td>
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### General Core Requirements: Computer Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSCI 0150</td>
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</tr>
<tr>
<td>&amp; CSCI 0160</td>
<td></td>
</tr>
<tr>
<td>Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures</td>
<td></td>
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</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSCI 0170</td>
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<tr>
<td>&amp; CSCI 0180</td>
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</tr>
<tr>
<td>Computer Science: An Integrated Introduction and Computer Science: An Integrated Introduction</td>
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</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CSCI 0190</td>
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</tr>
<tr>
<td>&amp; CSCI 0180</td>
<td></td>
</tr>
<tr>
<td>Accelerated Introduction to Computer Science</td>
<td></td>
</tr>
<tr>
<td>&amp; CSCI 0320</td>
<td></td>
</tr>
<tr>
<td>and Computer Science: An Integrated Introduction and Introduction to Software Engineering and Introduction to Computer Systems and Theory of Computation</td>
<td></td>
</tr>
<tr>
<td>&amp; CSCI 0330</td>
<td></td>
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<tr>
<td>&amp; CSCI 1010</td>
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<tr>
<td>Statistical Inference II</td>
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</table>

### General Core Requirements: Probability & Statistics

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<th>Credits</th>
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<tr>
<td>APMA 1650</td>
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OR

<table>
<thead>
<tr>
<th>Course</th>
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<td>Probability and Computing</td>
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OR

<table>
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<th>Credits</th>
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</thead>
<tbody>
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<td>MATH 1610</td>
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<tr>
<td>Probability</td>
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### Comp Bio Core Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CSCI 1810</td>
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<tr>
<td>Computational Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>APMA 1080</td>
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</tr>
<tr>
<td>Inference in Genomics and Molecular Biology</td>
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</table>

AND two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1820</td>
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<tr>
<td>Algorithmic Foundations of Computational Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1430</td>
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</tr>
<tr>
<td>Population Genetics</td>
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</tr>
<tr>
<td>BIOL 1465</td>
<td></td>
</tr>
<tr>
<td>Human Population Genomics</td>
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</tr>
<tr>
<td>CSCI 1420</td>
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</tr>
<tr>
<td>Machine Learning</td>
<td></td>
</tr>
<tr>
<td>APMA 1690</td>
<td></td>
</tr>
<tr>
<td>Computational Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>APMA 1660</td>
<td></td>
</tr>
<tr>
<td>Statistical Inference II</td>
<td></td>
</tr>
</tbody>
</table>

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.

### Six courses in one of the following three tracks:

#### 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

or other Computer Science courses approved by the concentration advisor

Three of the following:

- CSCI 0330 Introduction to Computer Systems
- CSCI 0320 Introduction to Software Engineering
- CSCI 1820 Algorithmic Foundations of Computational Biology
- PHP 2620 Statistical Methods in Bioinformatics, I
- APMA 1660 Statistical Inference II
- BIOL 1430 Population Genetics

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 & APMA 0330: Methods of Applied Mathematics I, II 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

Total Credits: 18-20

Honors:

In order to be considered a candidate for honors, students will be expected to maintain an outstanding record, with no "Cs" 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
- or MATH 0170: Advanced Placement Calculus

Concentration Requirements (15 courses)

Core-Computer Science:

Select one of the following introductory course 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 course, or an advanced course)

Select three of the following intermediate-level courses, one of which must be math-oriented and one systems-oriented:

Series D

- 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)
- CS 1450: Probability and Computing (math)

Additional Computer Science Courses:

Select one theoretical computer science course:

- 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:

- 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:

- CSCI 1230: Introduction to Computer Graphics
- CSCI 1260: Compilers and Program Analysis
- CSCI 1270: Database Management Systems
- CSCI 1300: User Interfaces and User Experience

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

A capstone course
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

1. Normally these advanced courses must be at the 1000-level or higher, though an intermediate-level course not used to satisfy a core requirement may be used.
2. These courses must include two pairs of courses with each pair 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. Five of the eight 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

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.

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:

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
CSCI 0180 Computer Science: An Integrated Introduction
Series C

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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
- or MATH 0540 Honors Linear Algebra
- or CSCI 0530 Directions: The Matrix in Computer Science (math)
- ECON 0110 Principles of Economics

Required Courses (17 courses):
- CSCI 1450 Probability and Computing (math)
- or APMA 1650 Statistical Inference I
- or 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 Computer Science: An Integrated Introduction
- & CSCI 0180 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.)

Two of the following intermediate 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 (systems)
- CSCI 1010 Theory of Computation

A pair of CS courses with a coherent theme. 1

An additional CS course that is either at the 1000-level or is an intermediate course not already used to satisfy concentration requirements. CSCI 1450 may not be used to satisfy this requirement.
- ECON 1130 Intermediate Microeconomics
- (Mathematical) 2
- ECON 1210 Intermediate Macroeconomics

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.
ECON 1630 Econometrics I 1
Three courses from the "mathematical economics" group: 3
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

and any graduate Economics course
Two additional 1000-level Economics courses 2
Capstone Course in either Computer Science or Economics 3

Total Credits 17

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.

Or ECON 1110, with permission.

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):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>or MATH 0540</td>
<td>Honors Linear Algebra</td>
</tr>
<tr>
<td>or CSCI 0530</td>
<td>Directions: The Matrix in Computer Science</td>
</tr>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
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#### Required Courses (13 courses):

<table>
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<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>CSCI 1450</td>
<td>Probability and Computing</td>
</tr>
<tr>
<td>or APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
<tr>
<td>or APMA 1655</td>
<td>Statistical Inference I</td>
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</table>

Select one of the following series: 2

##### Series A

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
</tr>
<tr>
<td>&amp; CSCI 0160</td>
<td>Introduction to Algorithms and Data Structures</td>
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##### Series B

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
</tr>
<tr>
<td>&amp; CSCI 0180</td>
<td>Computer Science: An Integrated Introduction</td>
</tr>
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</table>

##### Series C

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>CSCI 0190</td>
<td>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)</td>
</tr>
</tbody>
</table>

Two of the following intermediate courses, one of which must be math-oriented and one systems-oriented: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 0220</td>
<td>Introduction to Discrete Structures and Probability (math)</td>
</tr>
<tr>
<td>CSCI 0320</td>
<td>Introduction to Software Engineering (systems)</td>
</tr>
<tr>
<td>CSCI 0330</td>
<td>Introduction to Computer Systems (systems)</td>
</tr>
<tr>
<td>CSCI 1010</td>
<td>Theory of Computation</td>
</tr>
</tbody>
</table>

Two additional CS courses; at least one must be at the 1000-level. The other must either be at the 1000-level or be an intermediate course not already used to satisfy concentration requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics (Mathematical)</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>Econometrics I</td>
</tr>
<tr>
<td>ECON 1660</td>
<td>Big Data</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 1810</td>
<td>Economics and Psychology</td>
</tr>
<tr>
<td>ECON 1820</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>ECON 1850</td>
<td>Theory of Economic Growth</td>
</tr>
<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>

Three courses from the "mathematical-economics" group: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>
<tr>
<td>ECON 1465</td>
<td>Market Design: Theory and Applications</td>
</tr>
<tr>
<td>ECON 1470</td>
<td>Bargaining Theory and Applications</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 1750</td>
<td>Investments II</td>
</tr>
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<td>The Theory of General Equilibrium</td>
</tr>
<tr>
<td>ECON 1870</td>
<td>Game Theory and Applications to Economics</td>
</tr>
</tbody>
</table>

or any graduate Economics course

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?

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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
Select one from the following list: 1
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: 1
UNIV 0090 Meditation and the Brain: Applications in Basic and Clinical Science
COST 1020 Cognitive Neuroscience of Meditation
Two humanities courses that introduce students to contemplative religious traditions and to the philosophical analysis of the key questions of human existence from following list: 2
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

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)
APMA 1650 Statistical Inference I
CLPS 0900 Statistical Methods
CLPS 2906 Experimental Design
Two semesters of laboratory research in an established lab (e.g. BIOL 1950/1960) 2

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: 6

Contemplative Religious Traditions
CLAS 0850 Mythology of India
CLAS 0855 The Bhagavad Gītā
EAST 1420 The Confucian Mind
EAST 1880D Early Daoist Syncretism: Zhuang Zī and Huainan Zī
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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**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 for students with little to no Econ background, ECON 1510 for students with strong Econ backgrounds or double-concentrating in Econ)

- 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)

**Language Requirement**

The concentration requires students to demonstrate a basic proficiency in Chinese, Japanese, or Korean.

**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 Basic Chinese
- & CHIN 0200 and Basic Chinese
- CHIN 0300 Intermediate Chinese
- & CHIN 0400 and Intermediate Chinese
- CHIN 0500 Advanced Modern Chinese I
- & CHIN 0600 and Advanced Modern Chinese I

**Japanese**

- JAPN 0100 Basic Japanese
- & JAPN 0200 and Basic Japanese

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

EAST 1010 From Basho to Banana: Four Centuries of Japanese Literature 1
EAST 1070 China Modern: An Introduction to the Literature of Twentieth-Century China 1
EAST 1100 Korean Culture and Film 3
EAST 1200 Pop, Political and Patrician: Culture in Japan and the Koreas 4
EAST 1270 China Through the Lens: History, Cinema, and Critical Discourse

For additional elective choices, visit http://brown.edu/academics/ east-asian-studies/courses/more-course-offerings.

1 China-centric
2 Japan-centric
3 Korea-centric
4 East Asia-centric

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
EAST 1950G Market Economy, Popular Culture, and Mass Media in Contemporary China
EAST 1950X Queer Japan: Culture, History and Sexuality
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

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

EAST 0500 Childhood and Culture in Japan
EAST 1010 From Basho to Banana: Four Centuries of Japanese Literature
EAST 1070 China Modern: An Introduction to the Literature of Twentieth-Century China
EAST 1100 Korean Culture and Film
EAST 1200 Pop, Political and Patrician: Culture in Japan and the Koreas
EAST 1270 China Through the Lens: History, Cinema, and Critical Discourse

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100 Introductory Calculus, Part II</td>
<td>1</td>
</tr>
<tr>
<td>or a higher-level math course.</td>
<td></td>
</tr>
</tbody>
</table>

| Economics Course Requirements: |
|----------------------------------|---|
| ECON 0110 Principles of Economics | 3 |
| or ECON 1130 Intermediate Microeconomics | 1 |
| or ECON 1210 Intermediate Macroeconomics | 1 |
| ECON 1620 Introduction to Econometrics | 1 |
| ECON 1629 Applied Research Methods for Economists | 1 |
| or ECON 1630 Econometrics I | 1 |
| At least five additional 1000-level Economics courses. | 2 |

Total Credits 11

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>Human Development</th>
<th>OR</th>
<th>Adolescence in Social Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 0800</td>
<td></td>
<td>Introduction to Human Development and Education</td>
</tr>
<tr>
<td>EDUC 1270</td>
<td></td>
<td>Social Psychology of Race, Class, and Gender</td>
</tr>
</tbody>
</table>

Course in Human Development Area of Emphasis

5 Courses in Human Development (from the list below) 5

- EDUC 0410E Empowering Youth: Insights from Research on Urban Adolescents
- EDUC 0800 Introduction to Human Development and Education
- EDUC 1270 Adolescence in Social Context
- EDUC 1430 Social Psychology of Race, Class, and Gender
- EDUC 1450 The Psychology of Teaching and Learning
- EDUC 1580 Cross-Cultural Perspectives on Child Development
- EDUC 1700 The Asian American Experience in Higher Education
- EDUC 1710 History and Theories of Child Development
- EDUC 1750 Contemporary Social Problems: Views from Human Development and Education
- EDUC 1850 Moral Development and Education
- EDUC 1860 Social Context of Learning and Development
- EDUC 1870 Education and Human Development in East Asia
- EDUC 1880 Human Development in the Context of Immigration

1 Foundational course in History 1
1 Foundational course in Policy 1
1 Methods course 1
2 Electives 2
Total Credits 10

Courses in Policy-and-History Area of Emphasis

5 Courses in Policy-and-History (from the list below) 5

- EDUC 0400 The Campus on Fire: American Colleges and Universities in the 1960's
- EDUC 0410B Controversies in American Education Policy: A Multidisciplinary Approach
- EDUC 0410E Empowering Youth: Insights from Research on Urban Adolescents
- EDUC 0610 Brown v. Board of Education
- EDUC 0850 History of Intercollegiate Athletics
- EDUC 1020 The History of American Education
- EDUC 1030 Comparative Education

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 0950 Learning About Learning: Classrooms in Context
- EDUC 1010 The Craft of Teaching
- EDUC 1090 Adolescent Literature
- EDUC 1560 Philosophy of Education: Educational Thought and Practice
- EDUC 1690 Literacy, Community, and the Arts: Theory into Practice

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 1900 and EDUC 1990, 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.

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:**

<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 0370</td>
<td>Before the Islamic State: The Archealogies of Ancient Mesopotamia</td>
</tr>
<tr>
<td>or ARCH 1600</td>
<td>Archaeologies of the Near East</td>
</tr>
<tr>
<td>ASYR 1000</td>
<td>Introduction to Akkadian</td>
</tr>
<tr>
<td>ASYR 1010</td>
<td>Intermediate Akkadian</td>
</tr>
</tbody>
</table>

**Foundational Courses** (at least one course from each of the following three areas):

- **History and Culture of Ancient Western Asia:**
  - 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:**
  - 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:**
  - 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)
  - ARCH 2010C: Architecture, Body and Performance in the Ancient Near Eastern World (WRIT)
  - ARCH 2300: The Rise of the State in the Near East

**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 EGYT 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

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**Egyptology Track**

The Egyptology track requires a total of at least ten courses. Six of these must be taken by all concentrators, but the remaining four can be chosen from a fairly broad range of courses, to suit individual interests.

**Introductory Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<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</td>
<td>Ancient Egyptian Religion and Magic</td>
</tr>
<tr>
<td>or ARCH 1625</td>
<td>Temples and Tombs: Egyptian Religion and Culture</td>
</tr>
</tbody>
</table>

**Depth Courses:**

<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 the 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.

**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.

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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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-accredited. 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 ScB 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>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0330</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0400</td>
<td>Dynamics and Vibrations</td>
<td></td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</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>ENGN 0720</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
<td></td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
<td></td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td></td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
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<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>
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<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
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<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
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</table>

2. Upper-Level Chemical & Biochemical Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1110</td>
<td>Transport and Biotransport Processes</td>
<td></td>
</tr>
<tr>
<td>ENGN 1120</td>
<td>Chemical and Biochemical Reactor Design</td>
<td></td>
</tr>
<tr>
<td>ENGN 1130</td>
<td>Phase and Chemical Equilibria</td>
<td></td>
</tr>
<tr>
<td>ENGN 1710</td>
<td>Heat and Mass Transfer</td>
<td></td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td></td>
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</tbody>
</table>

Advanced Chemistry elective course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td></td>
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<tr>
<td>or CHEM 0400</td>
<td>Biophysical and Bioinorganic Chemistry</td>
<td></td>
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<tr>
<td>or CHEM 0500</td>
<td>Inorganic Chemistry</td>
<td></td>
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<tr>
<td>or CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
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</tbody>
</table>

Advanced Natural Sciences elective course

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1140</td>
<td>Chemical Process Design</td>
<td></td>
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</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 Name</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0330</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGN 0400</td>
<td>Dynamics and Vibrations</td>
<td></td>
</tr>
<tr>
<td>ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
<td></td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</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>ENGN 0720</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
<td></td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td></td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MATH 0190 Advanced Placement Calculus (Physics/Engineering) 1
or MATH 0170 Advanced Placement Calculus

MATH 0200 Intermediate Calculus (Physics/Engineering) 1
or MATH 0180 Intermediate Calculus
or MATH 0350 Honors Calculus

APMA 0330 Methods of Applied Mathematics I, II 1
or APMA 0350 Applied Ordinary Differential Equations

APMA 0340 Methods of Applied Mathematics I, II 1
or APMA 0360 Applied Partial Differential Equations I

CSCI 0040 Introduction to Scientific Computing and Problem Solving 1
or CSCI 0150 Introduction to Object-Oriented Programming and Computer Science

or CSCI 0170 Computer Science: An Integrated Introduction

or CSCI 0190 Accelerated Introduction to Computer Science

2. Upper-Level Civil Engineering Curriculum 4
ENGN 1300 Structural Analysis
ENGN 1340 Water Supply and Wastewater Treatment
ENGN 1360 Soil Mechanics and Principles of Foundation Engineering
GEOL 1330 Global Environmental Remote Sensing
or GEOL 1580 Quantitative Elements of Physical Hydrology
or GEOL 1590 Quantitative Modeling of Hydrologic Processes

3. Civil Engineering Specialty Options (Complete one of the following two course specialty sequences) 2

3a. Structures
ENGN 1380 Design of Civil Engineering Structures
ENGN 1310 Planning and Design of Systems
or ENGN 1370 Advanced Engineering Mechanics
or ENGN 1740 Computer Aided Visualization and Design
or ENGN 1750 Advanced Mechanics of Solids
or ENGN 1860 Advanced Fluid Mechanics

3b. Environmental Problems
ENGN 1130 Phase and Chemical Equilibria
ENGN 1310 Planning and Design of Systems

4. Capstone Design
ENGN 1930D Large Scale Engineering Design Project 1

*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:
ENGN 0030 Introduction to Engineering 1
ENGN 0040 Dynamics and Vibrations 1
ENGN 0510 Electricity and Magnetism 1
ENGN 0520 Electrical Circuits and Signals 1
APMA 1650 Statistical Inference 1

MATH 0190 Advanced Placement Calculus (Physics/Engineering) 1
or MATH 0170 Advanced Placement Calculus

MATH 0200 Intermediate Calculus (Physics/Engineering) 1
or MATH 0180 Intermediate Calculus
or MATH 0350 Honors Calculus

APMA 0330 Methods of Applied Mathematics I, II 1
or APMA 0350 Applied Ordinary Differential Equations

CHEM 0330 Equilibrium, Rate, and Structure 1
or ENGN 0410 Materials Science

Select one of the following series (other CSCI courses subject to approval):

CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
CSCI 0160 Programming and Introduction to Algorithms and Data Structures

CSCI 0170 Computer Science: An Integrated Introduction
CSCI 0180 and Computer Science: An Integrated Introduction

CSCI 0190 Accelerated Introduction to Computer Science (and one additional CSCI course subject to approval)

2. Advanced Core:
MATH 0520 Linear Algebra 1
or MATH 0540 Honors Linear Algebra

CSCI 0330 Introduction to Computer Systems 1
ENGN 1570 Linear System Analysis 1
ENGN 1630 Digital Electronics Systems Design 1

3. Specialty Courses: (Complete one of the following 5-course specialty sequences) 5

3a. For the Computer Specialty:
ENGN 1620 Analysis and Design of Electronic Circuits 1
ENGN 1640 Design of Computing Systems

Select one of the following (other ENGN courses subject to approval):

ENGN 1580 Communication Systems
ENGN 1600 Design and Implementation of Very Large-Scale Integrated Systems
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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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
   - 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 1
   - 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 1
   - ENGN 1620 Analysis and Design of Electronic Circuits 1
   - ENGN 1630 Digital Electronics Systems Design 1
   - PHYS 0790 Physics of Matter 1
     or PHYS 1410 Quantum Mechanics A 1

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 1520, NEUR 1680, or NEUR 2110). 1
   - 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). 1
   - 3c. Computer Engineering
     - CSCI 0330; and ENGN 1640; and one additional course from the following (ENGN 1580, ENGN 1600, ENGN 1610, ENGN 1650, or ENGN 2530). 1
   - 3d. Multimedia Signal Processing
     - ENGN 2530 or ENGN 1610; and two additional courses from the following (ENGN 1580, ENGN 1610, ENGN 1640, ENGN 1650, ENGN 2530, ENGN 2540, ENGN 2560 or CSCI 1230). 1
   - 3e. Microelectronic Systems
     - ENGN 1600; ENGN 1640; and one additional course from the following (ENGN 1590, ENGN 1680, ENGN 2530, or ENGN 2912K). 1
   - 3f. Solid State Electronics and Photonics
     - ENGN 1590; (ENGN 1560 or ENGN 1690); and one additional course from the following (ENGN 1450, ENGN 1560, ENGN 1600, ENGN 1660, ENGN 1680, ENGN 1931A, or PHYS 1420). 1
   - 4. Capstone Design 2
     - ENGN 1650 Embedded Microprocessor Design 1
     or ENGN 1000 Projects in Engineering Design 1

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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.abet.org/accreditation-criteria-policies-documents/).

1. Core Courses:

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<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 0720</td>
<td>Thermodynamics</td>
<td>1</td>
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<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>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Environmental Science in a Changing World</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
<td>1</td>
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<tr>
<td>MATH 0180</td>
<td>Intermediate Calculus</td>
<td>1</td>
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<tr>
<td>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>
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</table>

2. Advance Science Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOL 1370</td>
<td>Environmental Geochemistry</td>
<td>1</td>
</tr>
<tr>
<td>or GEOL 1580</td>
<td>Quantitative Elements of Physical Hydrology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0415</td>
<td>Microbes in the Environment (or an approved alternative Natural Science Course)</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 0420</td>
<td>Principles of Ecology</td>
<td>1</td>
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</table>

3. Environmental Engineering Specialty Options (Complete one of the following five course sequences)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGN 1110</td>
<td>Transport and Biotransport Processes</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1130</td>
<td>Phase and Chemical Equilibria</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1340</td>
<td>Water Supply and Wastewater Treatment</td>
<td>1</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) -

* In addition to program requirements above, students must take four courses in the humanities or social sciences.

Total Credits: 21

1. Subject to approval by the concentration advisor, an independent study course (ENGN 1970/1971) 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
(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>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
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</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>
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<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 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/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>1</td>
</tr>
</tbody>
</table>

MATH 0200  Intermediate Calculus (Physics/ Engineering)  

or MATH 0180  Intermediate Calculus  

or MATH 0350  Honors Calculus  

APMA 0330  Methods of Applied Mathematics I, II  

or APMA 0350  Applied Ordinary Differential Equations  

APMA 0340  Methods of Applied Mathematics I, II  

or APMA 0360  Applied Partial Differential Equations I  

CHEM 0350  Organic Chemistry  

or CSCI 0040  Introduction to Scientific Computing and Problem Solving  

or CSCI 0150  Introduction to Object-Oriented Programming and Computer Science  

or CSCI 0170  Computer Science: An Integrated Introduction  

or CSCI 0190  Accelerated Introduction to Computer Science  

2. Upper-Level Materials Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGN 1410</td>
<td>Physical Chemistry of Solids</td>
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<tr>
<td>ENGN 1420</td>
<td>Kinetics Processes in Materials Science and Engineering</td>
<td>1</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>
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Three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGN 1450</td>
<td>Properties and Processing of Electronic Materials</td>
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<tr>
<td>ENGN 1470</td>
<td>Structure and Properties of Nonmetallic Materials</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1480</td>
<td>Metallic Materials</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1490</td>
<td>Biomaterials</td>
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</tbody>
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3. Capstone Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</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 (ENGN197/197/1) 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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<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 0310</td>
<td>Mechanics of Solids and Structures</td>
<td>1</td>
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<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
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<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
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<td>ENGN 0520</td>
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<td>ENGN 0720</td>
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<td>CHEM 0330</td>
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<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/ Engineering)</td>
<td>1</td>
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<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
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</table>

MATH 0200  Intermediate Calculus (Physics/ Engineering)  

or MATH 0180  Intermediate Calculus  

or MATH 0350  Honors Calculus  

APMA 0330  Methods of Applied Mathematics I, II  

or APMA 0350  Applied Ordinary Differential Equations  

APMA 0340  Methods of Applied Mathematics I, II  

or APMA 0360  Applied Partial Differential Equations I  

CHEM 0330  Equilibrium, Rate, and Structure  

MATH 0190  Advanced Placement Calculus (Physics/ Engineering)  

2. Upper-Level Mechanical Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ENGN 1410</td>
<td>Physical Chemistry of Solids</td>
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<td>Kinetics Processes in Materials Science and Engineering</td>
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<tr>
<td>ENGN 1440</td>
<td>Mechanical Properties of Materials</td>
<td>1</td>
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<td>ENGN 1480</td>
<td>Metallic Materials</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1490</td>
<td>Biomaterials</td>
<td>1</td>
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</tbody>
</table>

2a. Aerospace Applications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0790</td>
<td>Physics of Matter</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1370</td>
<td>Advanced Engineering Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1700</td>
<td>Jet Engines and Aerospace Propulsion</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1720</td>
<td>Design of Thermal Engines</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1760</td>
<td>Design of Space Systems</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1860</td>
<td>Advanced Fluid Mechanics</td>
<td>1</td>
</tr>
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</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGN 1710</td>
<td>Heat and Mass Transfer</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 1300</td>
<td>Structural Analysis</td>
<td>1</td>
</tr>
</tbody>
</table>

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

2b. Biomechanics
ENGN 1000 Projects in Engineering Design
or ENGN 1930M Industrial Design
or ENGN 1931D Design of Mechanical Assemblies

2d. Engineering Mechanics
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
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

2e. Mechanical Systems: Dynamics, Materials, and Design
ENGN 1700 Jet Engines and Aerospace Propulsion
or ENGN 1710 Heat and Mass Transfer
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

2f. Structural Mechanics
PHYS 0790 Physics of Matter
ENGN 1700 Jet Engines and Aerospace Propulsion
ENGN 1710 Heat and Mass Transfer
ENGN 1760 Design of Space Systems

Capstone Design
ENGN 1000 Projects in Engineering Design
or ENGN 1930M Industrial Design
or ENGN 1931D Design of Mechanical Assemblies

*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.
2 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

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 curricula 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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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>Sequence</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 030 &amp; ENGN 0040</td>
<td>Introduction to Engineering and Dynamics and Vibrations</td>
</tr>
<tr>
<td>PHYS 0050 &amp; PHYS 0060</td>
<td>Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics</td>
</tr>
<tr>
<td>PHYS 0070 &amp; PHYS 0160</td>
<td>Analytical Mechanics and Introduction to Relativity and Quantum Physics</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
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<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
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Select one of the following two course sequences: 2

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

Select three additional higher-level math, applied math, or mathematical physics (PHYS 0720) courses. 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving</td>
</tr>
<tr>
<td>or CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
</tr>
<tr>
<td>or CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
</tr>
<tr>
<td>or CSCI 0190</td>
<td>Accelerated Introduction to Computer Science</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>or PHYS 0470</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>ENGN 1560</td>
<td>Applied Electromagnetics</td>
</tr>
<tr>
<td>or PHYS 1510</td>
<td>Advanced Electromagnetic Theory</td>
</tr>
<tr>
<td>PHYS 0500</td>
<td>Advanced Classical Mechanics</td>
</tr>
<tr>
<td>or ENGN 1370</td>
<td>Advanced Engineering Mechanics</td>
</tr>
<tr>
<td>PHYS 1410</td>
<td>Quantum Mechanics A</td>
</tr>
<tr>
<td>or PHYS 1420</td>
<td>Quantum Mechanics B</td>
</tr>
<tr>
<td>PHYS 1530</td>
<td>Thermodynamics and Statistical Mechanics</td>
</tr>
<tr>
<td>or ENGN 0720</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ENGN 1620</td>
<td>Analysis and Design of Electronic Circuits</td>
</tr>
<tr>
<td>or CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
</tr>
<tr>
<td>or ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
</tr>
<tr>
<td>or ENGN 0810</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>or PHYS 1600</td>
<td>Computational Physics</td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
</tr>
<tr>
<td>or ENGN 1690</td>
<td>Photonics and Applications</td>
</tr>
<tr>
<td>or PHYS 0560</td>
<td>Experiments in Modern Physics</td>
</tr>
<tr>
<td>PHYS 1560</td>
<td>Modern Physics Laboratory</td>
</tr>
<tr>
<td>or ENGN 1590</td>
<td>Introduction to Semiconductors and Semiconductor Electronics</td>
</tr>
<tr>
<td>or an approved 2000-level engineering or physics course.</td>
<td></td>
</tr>
</tbody>
</table>

A thesis under the supervision of a physics or engineering faculty member: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
</tr>
<tr>
<td>or ENGN 1970</td>
<td>Independent Studies in Engineering</td>
</tr>
<tr>
<td>or ENGN 1971</td>
<td>Independent Study in Engineering</td>
</tr>
</tbody>
</table>

* Students are also encouraged to take courses dealing with the philosophical, ethical, or political aspects of science and technology.

| Total Credits | 19 |

**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 concentration students 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 course in “How Literature Matters” (ENGL0100): 1

   Addressing topics about which professors are especially passionate, these introductory courses aim to deepen and refine students’ understanding of how literature matters: aesthetically, ethnically, historically and politically. Students not only engage with larger questions about literature’s significance, exploring the particular kinds of insights and thinking it is especially suited for conveying, they also gain a deeper awareness of the critical methods we use to understand and analyze it, engaging with matters of form, genre and media. Finally, these courses help students develop their skills as close, careful readers of literary form and language.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 0100A</td>
<td>How To Read A Poem</td>
</tr>
<tr>
<td>ENGL 0100D</td>
<td>Matters of Romance</td>
</tr>
<tr>
<td>ENGL 0100F</td>
<td>Devils, Demons, and Do Goods</td>
</tr>
<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>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
2. ONE course in Medieval and Renaissance Literatures (Pre-1700):

These courses, which center on Medieval and Renaissance literary works, cast light on periods that can come across to us as both familiar and strange. They focus our attention on how literatures from these periods depict concepts such as aesthetics, romance, gender, sexuality, race, power and politics in ways that are like and unlike how we tend to think of them today—on how pre-modern or early modern works can both defamiliarize the categories of experience and identity we tend to take for granted and also suggest something of their origins. Several courses under this rubric will also engage with recent literary and filmic adaptations of works from these eras, exploring how many such works continue to function as vibrant and at times ambivalent inspirations for the literary imaginings of later periods.

3. ONE course in Literatures of Modernity (Post-1700):

These courses explore the many strands of writing in English that have emerged from the eighteenth century through the present, shaping the contemporary world. These literatures reflect on political, economic, and intellectual history, from the idea of the nation and the structures of capital through the rise and dissolution of empire and the emergence of postcolonial states, including the forms of race, gender and sexuality that cut across them. Courses also examine how aesthetic works can shape and critique their moment: they look at genres like the novel and short story, poetry, drama, essays, and new, hybrid forms that have arisen with expanding digital media; they also take up a multitude of literary movements whose influences remain with us today, including Romanticism, realism, naturalism, modernism, and post-modernism.

4. ONE course in Literatures of the Color Line (Literature Across Borders):

In 1903, W. E. B. Du Bois famously proclaimed in "The Souls of Black Folk" that "The problem of the twentieth century is the problem of the color-line,—the relation of the darker to the lighter races of men in Asia and Africa, in America and the islands of the sea." Courses in this category explore the complex ways in which literary texts have addressed American histories of race, ethnicity, and empire. They may do so from the vantage point of ideas about difference and hierarchy that predate the modern conception of race and by engaging with earlier histories of conflict and contact. These courses explore issues of intersectionality as well, highlighting how race operates in relation to other structures of difference such as gender, sexuality and class.

5. ONE course in Literary Theory and Cultural Critique:

The late-twentieth century saw a revolution in the field of literary studies in the United States, as critics turned their attention to the contextual and historical nature of our categories of knowledge. This turn to theory was influenced by developments in psychoanalysis, linguistics, philosophy, political theory and sociology and by the emergence of social movements that challenged such structures as patriarchy, homophobia, racism, imperialism, economic inequality, and environmental violence. The avenues of inquiry opened up brought an increased awareness of the implication of literature in the operations of power and ideology; a sense of the potential for literary modes of presentation to challenge and displace such operations; and a new attention to the role of gender, race, empire, class, and sexuality in the formation of the literary work. Courses that satisfy the Literary Theory and Cultural Critique requirement explore some dimension of these issues—either directly, taking as their primary focus a set of theoretical questions or debates, or indirectly, by examining a compelling topical question of social and political significance through works of literature and literary theory.

6. FIVE electives

Total Credits: 10

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.

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 1991 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/N.

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:

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 SNC 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 semester for the draft, it is due 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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 and 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 Program. Following a successful review, the student will be eligible to graduate with Honors in Nonfiction Writing.

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 these 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

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>ENGL 0110 Principles of Economics 1</th>
<th>1</th>
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<tbody>
<tr>
<td>ENVS 0490 Environmental Science in a Changing World 1</td>
<td>1</td>
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<tr>
<td>ENVS 0495 Introduction to Environmental Social Science</td>
<td>1</td>
<td></td>
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<tr>
<td>BIOL 0210 Diversity of Life</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>or GEOL 0240 Earth: Evolution of a Habitable Planet</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Methods - one course</td>
<td>ENVS 1920 Methods for Interdisciplinary Environmental Research</td>
<td>1</td>
</tr>
<tr>
<td>Electives - three courses</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Capstone - one or two courses</td>
<td>1-2</td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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<td>SOC 1340</td>
<td>Principles and Methods of Geographic Information Systems</td>
</tr>
</tbody>
</table>

**SELECT A FOCUS AREA (pick three courses from only one focus area)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0010</td>
<td>Anthropology and Global Social Problems: Select Three</td>
</tr>
<tr>
<td>ECON 1355</td>
<td>Environmental Issues in Development Economics</td>
</tr>
<tr>
<td>ECON 1510</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECON 1530</td>
<td>Health, Hunger and the Household in Developing Countries</td>
</tr>
<tr>
<td>ENVS 1415</td>
<td>Power, Justice, and Climate Change</td>
</tr>
<tr>
<td>HIST 0150D</td>
<td>Refugees: A Twentieth-Century History</td>
</tr>
<tr>
<td>PHP 1070</td>
<td>The Burden of Disease in Developing Countries</td>
</tr>
<tr>
<td>POLS 1730</td>
<td>Politics of Globalization</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Critical Perspectives on Development: Select One

**Track 5 - Sustainability in Development**

**Earth/Life Systems: Select Three**

- 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
- 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 score of 4 or 5 on Calc AB.
2. The ACE MATH 0090 and MATH 100 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/education/undergraduate/honors) on the IBEES 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

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ETHN 1000</td>
<td>Introduction to American/Ethnic Studies</td>
<td>1</td>
</tr>
<tr>
<td>ETHN 1200B</td>
<td>Contemporary Indigenous Education in North America</td>
<td></td>
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<tr>
<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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<tr>
<td>ETHN 1750A</td>
<td>Immigrant Social Movements: Bridging Theory and Practice</td>
<td></td>
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<tr>
<td>ETHN 1750B</td>
<td>Treaty Rights and Food Fights: Eating Local in Indian Country</td>
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<tr>
<td>ETHN 1750D</td>
<td>Transpacific Asian American Studies</td>
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<tr>
<td>ETHN 1750E</td>
<td>Transpacific Popular Culture</td>
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</table>

Any two courses offered through Ethnic Studies in the 1200 or 1750 sequence or topical electives in American Studies, as approved by the instructor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AMST 1700D</td>
<td>Race and Remembering</td>
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<tr>
<td>AMST 1700F</td>
<td>American Publics</td>
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<tr>
<td>AMST 1700G</td>
<td>Public Memory: Narratives of 9/11</td>
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<tr>
<td>AMST 1700I</td>
<td>Community Engagement with Health and the Environment</td>
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<td>AMST 1700K</td>
<td>Race in the Americas: A Hemispheric Perspective</td>
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<tr>
<td>AMST 1700L</td>
<td>Bad Rehab: Rehabilitation Regimes of the American Ethnic</td>
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<tr>
<td>AMST 1900A</td>
<td>The Problem of Class in America</td>
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<tr>
<td>AMST 1900B</td>
<td>America and the Asian Pacific: A Cultural History</td>
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<tr>
<td>AMST 1900C</td>
<td>Narratives of Slavery</td>
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<tr>
<td>AMST 1900D</td>
<td>America as a Trans-Pacific Culture</td>
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<tr>
<td>AMST 1900F</td>
<td>Transnational Popular Culture</td>
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<tr>
<td>AMST 1900G</td>
<td>Movements, Morals, and Markets</td>
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<tr>
<td>AMST 1900H</td>
<td>New Media as a Tool for Social and Political Change</td>
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<tr>
<td>AMST 1900I</td>
<td>Latino/a Cultural Theory</td>
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<tr>
<td>AMST 1900J</td>
<td>Race, Immigration and Citizenship</td>
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<tr>
<td>AMST 1900K</td>
<td>China in the American Imagination</td>
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<tr>
<td>AMST 1900L</td>
<td>Cold War Culture The American Culture in the Cold War</td>
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<tr>
<td>AMST 1900N</td>
<td>Ethnicity, Identity and Culture in 20th Century New York City</td>
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<tr>
<td>AMST 1900O</td>
<td>Filipino American Cultures</td>
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<tr>
<td>AMST 1900P</td>
<td>Essaying Culture</td>
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</table>

Four classes (at least two in Ethnic Studies) that address the students’ research focus and that prepare them for the capstone experience. Courses must be approved by the concentration advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ETHN 1650</td>
<td>Approaches in Ethnic Studies</td>
<td>1</td>
</tr>
<tr>
<td>ETHN 1900A</td>
<td>Alien Nation: US Immigration in Comparative Perspectives</td>
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<tr>
<td>ETHN 1900B</td>
<td>Community, Language and Literacy: A Practicum</td>
<td></td>
</tr>
<tr>
<td>ETHN 1900C</td>
<td>Contemporary Latino/a Education in the United States</td>
<td></td>
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<tr>
<td>ETHN 1900D</td>
<td>Latino Communities Seminar</td>
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<tr>
<td>ETHN 1900E</td>
<td>Senior Seminar in Ethnic Studies</td>
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<tr>
<td>ETHN 1900F</td>
<td>Theory, Creativity, Activism</td>
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<tr>
<td>ETHN 1900G</td>
<td>Race and Immigration in the Americas</td>
<td></td>
</tr>
<tr>
<td>ETHN 1900H</td>
<td>What is Ethnic Studies?</td>
<td></td>
</tr>
<tr>
<td>ETHN 1900N</td>
<td>Transpacific Asian American Studies</td>
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<tr>
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<tbody>
<tr>
<td>AMST 1900Q</td>
<td>From Perry to Pokemon: Japan in the United States, the United States in Japan</td>
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<tr>
<td>AMST 1900R</td>
<td>Gender, Race, and Class in the United States</td>
<td></td>
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<tr>
<td>AMST 1900S</td>
<td>Green Cities: Parks and Designed Landscapes in Urban America</td>
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<tr>
<td>AMST 1900T</td>
<td>Disability: History, Theory, and Bodily Difference</td>
<td></td>
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<tr>
<td>AMST 1900U</td>
<td>Immigrant Radicals: Asian Political Movements in the Americas 1850-1970</td>
<td></td>
</tr>
<tr>
<td>AMST 1900V</td>
<td>Immigrants, Exiles, Refugees, and Citizens in the Americas</td>
<td></td>
</tr>
<tr>
<td>AMST 1900W</td>
<td>Latina Literature: The Shifting Boundaries of Identity</td>
<td></td>
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<tr>
<td>AMST 1900X</td>
<td>Latino/a Religions: Encounters of Contestations and Transformations</td>
<td></td>
</tr>
<tr>
<td>AMST 1900Y</td>
<td>Latino New York</td>
<td></td>
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<tr>
<td>AMST 1900Z</td>
<td>Latinos and Film</td>
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</tbody>
</table>

A course from the ETHN 1900 series:

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<td>Community, Language and Literacy: A Practicum</td>
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<tr>
<td>ETHN 1900H</td>
<td>What is Ethnic Studies?</td>
<td></td>
</tr>
<tr>
<td>ETHN 1900N</td>
<td>Transpacific Asian American Studies</td>
<td></td>
</tr>
</tbody>
</table>

**Honors:**

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

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

- ETHN 0500  Introduction to American/Ethnic Studies  1
- Any two introductory courses in Latino/a, Africana, Asian-American, or Native American Studies. The courses in the list below are examples of these courses. Other courses may be approved by the Advisor.
  - AFRI 0090  An Introduction to African Studies
  - ANTH 1121  From Coyote to Casinos: Native North American Peoples and Cultures
  - SOC 1270  Race, Class, and Ethnicity in the Modern World
- A course from the AMST 1610 series, as approved by the concentration advisor
- ETHN 1870A  Ethnic Writing
- ETHN 1870B  Critical Mixed Race Studies in the Twenty-First Century
- ETHN 1870D  Immigrant Social Movements: Bridging Theory and Practice
- ETHN 1870E  Latinx Community Seminar
- ETHN 1870F  Native Americans in the Media: Representations and Self Representations in Film
- ETHN 1870G  Chicana/o Fiction
- ETHN 1870H  Queer Latina/o Literature and Theory
- ETHN 1870I  Eating Cultures
- ETHN 1870J  Reading Race: Advanced Seminar in Critical Race Theory
- ETHN 1890A  Seminar on Latin Politics in the United States
- ETHN 1890B  Native American and European Contact in Early North America, ca. 1600-1750
- ETHN 1890C  Business, Culture, and Globalization: An Ethnographic Perspective
- ETHN 1890D  Indigenous Music of the Americas
- ETHN 1890E  Johnny, Are You Queer: Narratives of Race and Sexuality
- ETHN 1890F  Bad Boys and Bad Girls in Asian American Literature and Culture
- ETHN 1890G  Native Americans in the Media: Representation and Self-Representation on Film
- ETHN 1890H  Introduction to American Indian Studies
- ETHN 1890I  Native American Environmental Health Movements
- ETHN 1890J  Engendering Empire
- ETHN 1890K  (De)Colonizing Women: Writing the Third Space
- ETHN 1890L  Treaty Rights and Food Fights: Eating Local in Indian Country
- ETHN 1890M  Thawing the “Frozen Indian”: American Indian Museum Representation
- ETHN 1890N  Introduction to Native American Literature
- ETHN 1890O  The Hispanic Caribbean and its Diasporas
- ETHN 1890P  Latina Feminisms
- ETHN 1890Q  Youth, Art, Engagement and Social Justice
- ETHN 1890R  Race, Class and Gender in Latino Communities
- ETHN 1890S  Any three courses from the ETHN 1900 series
- ETHN 1890T  Transpacific Asian American Studies

Courses taught by core Ethnic Studies faculty may be recognized in consultation with concentration advisor.

Any three courses in Ethnic Studies that address the student's focus area (as approved by the concentration advisor), for example:

- ETHN 1890A  The Border/La Frontera
- ETHN 1890B  Critical Mixed Race Studies in the Twenty-First Century
- ETHN 1890C  Ethnic Writing
- ETHN 1890D  Introduction to Latina/o Cultural Studies
- ETHN 1890E  Native Americans and the Media
- ETHN 1890F  Theory into Practice: Service Learning at a Dual Language Charter School
- ETHN 1890G  Race and Remembering
- ETHN 1890H  Hip Hop Music and Cultures
- ETHN 1890I  The Research Process: Qualitative and Ethnographic Methods
- ETHN 1890J  Race and Language in the United States
- ETHN 1890K  Race in the Americas
- ETHN 1890M  Immigrant Social Movements: Bridging Theory and Practice
- ETHN 1890N  Latinx Community Seminar
- ETHN 1890O  Native Americans in the Media: Representations and Self Representations in Film
- ETHN 1890P  Chicana/o Fiction
- ETHN 1890Q  Queer Latina/o Literature and Theory
- ETHN 1890R  Eating Cultures
- ETHN 1890S  Reading Race: Advanced Seminar in Critical Race Theory
- ETHN 1890T  Seminar on Latin Politics in the United States

1  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 or Francophone Studies. Concentrators must observe following guidelines of advising should contact (401-863-7034).

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.

Note: A maximum of four courses from study in France or a Francophone country may count toward the concentration, from either a single semester or an entire year. A year or semester of study abroad in France or a Francophone country is considered an integral part of the concentration and is therefore highly recommended. Our concentrators 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. Through the Brown-in-France program administered by OIP and departmental faculty, students can enroll directly in French institutions.

FREN 0600 Writing and Speaking French II (is accepted for concentration credit)

Required Courses

One (and no more than two) of the following 0720,0750,0760 courses gateway courses:

FREN 0720A De l'Amour courtois au désir postmoderne
FREN 0720B The French Novel Today

Electives

At least two 1000-level courses offered in the Department of French Studies (excluding FREN 1510 and FREN 1900) are required

Up to two 1000-level courses taught in English offered 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 post-Revolutionary period

FREN 1000A Littérature et intertextualité: du Moyen Âge jusqu'à la fin du XVIIème s
FREN 1000B Littérature et culture: Chevaliers, sorcières, philosophes, et poètes
FREN 1030A L’univers de la Renaissance: XVè et XVIè siècles
FREN 1030B Le French Renaissance: The Birth of Modernity?
FREN 1040A Civilité et littérature
FREN 1040B Pouvoirs de la scéne: le théâtre du XVIIe siècle
FREN 1040C Le Grand Siècle à l’écran
FREN 1040D Molière et son monde
FREN 1050A "Family Values": Représentations littéraires de la famille au 18ème siècle
FREN 1050B Fictions de l’individu
FREN 1050D The Age of Voltaire: Culture, Pensee, Société
FREN 1050E French Lovers: Séduction et libertinage sous l'Ancien Régime
FREN 1050F Espace public; espace privé
FREN 1050G Le corps des Lumières
FREN 1050H The Age of Voltaire: Lumières et modernité
FREN 1100F Contes et nouvelles du Moyen Age
FREN 1410I Littérature et culture: Chevaliers, sorcières, philosophes, et poètes

One (and no more than two) of the following 0720,0750,0760 courses gateway courses:

FREN 1510A Advanced Oral and Written French: Traduction
FREN 1510F Advanced Written and Oral French: Regards sur la France actuelle
FREN 1510C Advanced Oral and Written French: A table!
FREN 1510J Advanced Oral and Written French: Photographie

The senior seminar (senior year spring)

FREN 1900H La France en guerre

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors concentrators fulfill the regular requirements plus completing a two–semester thesis as their capstone project.

For more information, including current cross-listed courses and sample concentration plans, please consult the GNSS concentration webpage (http://www.brown.edu/research/pembroke-center/gender-and-sexuality-studies/undergraduate-concentration-gender-sexuality-studies) at the Brown University GNSS concentration webpage.

Total Credits 10

1 Or another appropriate course as agreed to by concentration advisor

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. 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
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 quantitative approaches to 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

Select two courses in mathematics at the level of:
- MATH 0090 Introductory Calculus, Part I
- MATH 0100 Introductory Calculus, Part II

or another more advanced math or statistics course

<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 advanced placement)</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following Series:

- PHYS 0050 & PHYS 0060 Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics (or more advanced) |
- ENGN 0030 & ENGN 0040 Introduction to Engineering and Dynamics and Vibrations (or more advanced)

#### Concentration courses

<table>
<thead>
<tr>
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<th>Course Title</th>
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</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 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>
</tbody>
</table>

A field course

Select four courses 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>GEOL 1970</td>
<td>Individual Study of Geologic Problems (Senior Research Thesis)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### 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, paleoclimate, Earth systems science, biogeochemistry, oceanography, or paleobiology.

#### Geology-Biology

<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>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>1</td>
</tr>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering (or more advanced, or courses in data analysis and statistics)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Concentration courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOL 0220</td>
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<td>Geochemistry: Earth and Planetary Materials and Processes</td>
<td>1</td>
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<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>
<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>
</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>1</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>
<td>1</td>
</tr>
<tr>
<td>BIOL 0420</td>
<td>Principles of Ecology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0430</td>
<td>The Evolution of Plant Diversity</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0440</td>
<td>Inquiry in Plant Biology: Analysis of Plant Growth, Reproduction and Adaptive Responses</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1470</td>
<td>Conservation Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1480</td>
<td>Terrestrial Biogeochemistry and the Functioning of Ecosystems</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1500</td>
<td>Plant Physiological Ecology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0580</td>
<td>Foundations of Physical Hydrology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1110</td>
<td>Estuarine Oceanography</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1120</td>
<td>Paleoenvironment</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1130</td>
<td>Ocean Biogeochemical Cycles</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1150</td>
<td>Limnology: The Study of Lakes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1330</td>
<td>Global Environmental Remote Sensing</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1350</td>
<td>Weather and Climate</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1370</td>
<td>Environmental Geochemistry</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1380</td>
<td>Environmental Stable Isotopes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1510</td>
<td>Introduction to Atmospheric Dynamics</td>
<td>1</td>
</tr>
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</table>

### Total Credits

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
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</tr>
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<td>Structural Geology</td>
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</tr>
</tbody>
</table>

Total Credits 13

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
of 20 courses, including 7 geoscience courses and 4 chemistry courses, supporting math and physics courses. The ScB degree requires a total including 5 geoscience courses and 4 chemistry courses, and a few the Earth and other planets, magma formation and properties, volcanic temperature geochemistry includes study of formation and evolution of bodies, and how the geochemical record reflects climate conditions. High-

- 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 supporting math and physics courses. The ScB degree requires a total of 20 courses, including 7 geoscience courses and 4 chemistry courses, either with an organic or an inorganic focus, 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 program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geochemistry and related fields.

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-

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<td>Foundations of Mechanics (or more advanced)</td>
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</tr>
<tr>
<td>or ENGN 0030</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>MATH 0900</td>
<td>Introductory Calculus, Part I</td>
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<tr>
<td>MATH 1000</td>
<td>Introductory Calculus, Part II (or more advanced, or advanced courses in data analysis)</td>
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<tr>
<td></td>
<td>Fourteen (14) concentration courses</td>
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<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
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</tr>
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<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes</td>
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<td>GEOL 0240</td>
<td>Earth: Evolution of a Habitable Planet</td>
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<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
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</tr>
<tr>
<td></td>
<td>Three biology courses from the following:</td>
<td>3</td>
</tr>
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<td>BIOL 0390</td>
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<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three geological sciences courses from the following:</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 0580</td>
<td>Foundations of Physical Hydrology</td>
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<td>GEOL 1380</td>
<td>Environmental Stable Isotopes</td>
<td></td>
</tr>
<tr>
<td>GEOL 1510</td>
<td>Introduction to Atmospheric Dynamics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the concentration advisor</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1970</td>
<td>Individual Study of Geologic Problems (Senior Research Thesis)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>19</td>
</tr>
</tbody>
</table>

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

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.

GEOL 0220 Physical Processes in Geology 1
GEOL 0250 Computational Approaches to Modelling and Quantitative Analysis in Natural Sciences: An Introduction 1
or GEOL 0350 Mathematical Methods of Fluid and Solid Geophysics and Geology

Four theme courses (choose either the Solid Earth Geophysics Theme or the Climate Science Theme)

Solid Earth Geophysics Theme
GEOL 0230 Geochemistry: Earth and Planetary Materials and Processes (solid Earth geophysics theme)
GEOL 1610 Solid Earth Geophysics (solid Earth geophysics theme)

And select two of the following:
GEOL 1410 Mineralogy (solid Earth geophysics theme)
GEOL 1420 Petrology
GEOL 1450 Structural Geology (solid Earth geophysics theme)
GEOL 1620 Continuum Physics of the Solid Earth (solid Earth geophysics theme)

Climate Science Theme
GEOL 0240 Earth: Evolution of a Habitable Planet (climate science theme)
GEOL 1350 Weather and Climate (climate science theme)

And select two from the following:
GEOL 1130 Ocean Biogeochemical Cycles (climate science theme)
GEOL 1310 Global Water Cycle (climate science theme)
GEOL 1430 Principles of Planetary Climate (climate science theme)
GEOL 1510 Introduction to Atmospheric Dynamics (climate science theme)
GEOL 1520 Ocean Circulation and Climate

Choose one of the following:
PHYS 0050 Foundations of Mechanics
PHYS 0070 Analytical Mechanics
ENGN 0040 Dynamics and Vibrations

Choose one of the following:
PHYS 0060 Foundations of Electromagnetism and Modern Physics
ENGN 0310 Mechanics of Solids and Structures
ENGN 0810 Fluid Mechanics 1

Choose one of the following:
PHYS 0470 Electricity and Magnetism
PHYS 0500 Advanced Classical Mechanics
PHYS 1600 Computational Physics
ENGN 0510 Electricity and Magnetism
ENGN 0810 Fluid Mechanics 1,2
ENGN 1370 Advanced Engineering Mechanics
GEOL 1820 Geophysical Fluid Dynamics

Three courses in Mathematics, including:
APMA 0330 Methods of Applied Mathematics I, II

Total Credits 20

1 Advanced placement may be substituted for the first semester of physics.
One additional course from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.

Total Credits 14
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.

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.

GEOL 0220 Physical Processes in Geology 1
GEOL 1430 Principles of Planetary Climate 1
GEOL 1610 Solid Earth Geophysics 1
GEOL 0250 Computational Approaches to Modelling and Quantitative Analysis in Natural Sciences: An Introduction 1
or GEOL 0350 Mathematical Methods of Fluid and Solid Geophysics and Geology 1

Five theme courses (choose either the Solid Earth Geophysics theme or the Climate Science Theme): 5

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 1
or ENGN 0310 Mechanics of Solids and Structures

or ENGN 0810 Fluid Mechanics
Select two of the following: 1,2
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. 2

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 or 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);

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

<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 (or equivalent placement)</td>
<td>1</td>
</tr>
<tr>
<td>OR MATH 0050 &amp; MATH 0060</td>
<td>Analytic Geometry and Calculus</td>
<td>1</td>
</tr>
<tr>
<td>OR MATH 0100 or MATH 0170</td>
<td>Introductory Calculus, Part II Advanced Placement Calculus</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
<td>1</td>
</tr>
</tbody>
</table>

**CORE PROGRAM:**

In addition to the stated background in Chemistry, Math, Biology and Statistics, five (5) Biology plus four (4) coherently-grouped Theme courses, plus a Senior-Year Capstone course or project. (See description of Capstone at link below this table).

**BIOLOGY:**

Five (5) courses, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0480 &amp; BIOL 0500</td>
<td>Evolutionary Biology and Cell and Molecular Biology</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 0480 &amp; BIOL 0510</td>
<td>Evolutionary Biology and Introductory Microbiology</td>
<td>2</td>
</tr>
</tbody>
</table>

**Select one course in structure/function/development such as:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0400</td>
<td>Biological Design: Structural Architecture of Organisms</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1310</td>
<td>Developmental Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1800</td>
<td>Animal Locomotion</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 0010</td>
<td>The Brain: An Introduction to Neuroscience</td>
<td>1</td>
</tr>
</tbody>
</table>

**One course in organismal/population biology such as:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0370</td>
<td>Experimental Evolution</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0380</td>
<td>The Ecology and Evolution of Infectious Disease</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0390</td>
<td>Vertebrate Evolution and Diversity</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0400</td>
<td>Biological Design: Structural Architecture of Organisms</td>
<td>1</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>
<td>1</td>
</tr>
<tr>
<td>BIOL 0420</td>
<td>Principles of Ecology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1470</td>
<td>Conservation Biology</td>
<td>1</td>
</tr>
<tr>
<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>

Or a course from the NEUR 1940 series

c) Two Biology or Neuroscience courses that relate to and support the chosen theme course grouping. At least one must be at the advanced level.

**THEME:**

With the advisor's assistance, a theme is chosen and a cohesive set of courses are selected from outside of Biology. See Notes below:

**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.

**CAPSTONE:**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HISP 0600</td>
<td>Advanced Spanish II (Pre-requisite)</td>
</tr>
</tbody>
</table>

Required courses: one of the following 0700 level courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISP 0730</td>
<td>Encounters: Latin America in Its Literature and Culture</td>
</tr>
<tr>
<td>HISP 0740</td>
<td>Intensive Survey of Spanish Literature</td>
</tr>
<tr>
<td>HISP 0760</td>
<td>Transatlantic Crossings: Readings in Hispanic Literatures</td>
</tr>
</tbody>
</table>

Up to two more 0700 level courses including, additionally:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISP 0710</td>
<td>Culture and Advanced Spanish Language (any course in the series)</td>
</tr>
<tr>
<td>HISP 0750</td>
<td>Topics in Hispanic Culture/Civilization (any course in the series)</td>
</tr>
</tbody>
</table>

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 or1000 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 up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
For details on which courses count toward which geographical distribution requirement click here (https://docs.google.com/spreadsheets/d/1NT5jzAqXDCiv2XcTdscceSnMD5v26ke6550tnBrnE/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. Students taking courses in Brown-run programs abroad may 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

HIST 0150A History of Capitalism
HIST 0150B The Philosophers’ Stone: Alchemy From Antiquity to Harry Potter
HIST 0150C Locked Up: A Global History of Prison and Captivity
HIST 0150D Refugees: A Twentieth-Century History
HIST 0150F Pirates
HIST 0150G History of Law: Great Trials
HIST 0150H Foods and Drugs in History

Gateway Lecture Courses

HIST 0203 Modern Africa
HIST 0212 Histories of East Asia: China
HIST 0214 Histories of East Asia: Japan
HIST 0215 Modern Korea: Contending with Modernity
HIST 0218 The Making of Modern East Asia
HIST 0228A War and Peace in Modern Europe
HIST 0232 Clash of Empires in Latin America

HIST 0233 Colonial Latin America
HIST 0234 Modern Latin America
HIST 0243 Modern Middle East Roots: 1492 to the Present
HIST 0244 Understanding the Middle East: 1800s to the Present
HIST 0247 Civilization, Empire, Nation: Competing Histories of the Middle East
HIST 0250 American Exceptionalism: The History of an Idea
HIST 0252 The American Civil War
HIST 0253 Religion, Politics, and Culture in America, 1865 - Present
HIST 0257 Modern American History: New and Different Perspectives
HIST 0270A From Fire Wielders to Empire Builders: Human Impact on the Global Environment before 1492
HIST 0270B From the Columbian Exchange to Climate Change: Modern Global Environmental History
HIST 0273A The First Globalization: The Portuguese in Africa, Asia, and the Americas
HIST 0276 A Global History of the Atomic Age
HIST 0276B Science and Capitalism
HIST 0285A Modern Genocide and Other Crimes against Humanity
HIST 0286A History of Medicine I: Medical Traditions in the Old World Before 1700
HIST 0286B History of Medicine II: The Development of Scientific Medicine in Europe and the World

SEMINAR COURSES

First-Year Seminars

HIST 0505 Africa and the Transatlantic Slave Trade
HIST 0510A Shanghai in Myth and History
HIST 0520A Athens, Jerusalem, and Baghdad: Three Civilizations, One Tradition
HIST 0521A Christianity in Conflict in the Medieval Mediterranean
HIST 0521M The Holy Grail and the Historian’s Quest for the Truth
HIST 0522G An Empire and Republic: The Dutch Golden Age
HIST 0522N Reason, Revolution and Reaction in Europe
HIST 0522O The Enlightenment
HIST 0523A The Holocaust in Historical Perspective
HIST 0523B State Surveillance in History
HIST 0523O The Academic as Activist
HIST 0535A Atlantic Pirates
HIST 0537A Popular Culture in Latin America and the Caribbean
HIST 0537B Tropical Delights: Imagining Brazil in History and Culture
HIST 0540F Women in the Middle East, 7th-20th C.: Patriarchal Visions, Revolutionary Voices
HIST 0550A Object Histories: The Material Culture of Early America
HIST 0551A Abraham Lincoln: Historical and Cultural Perspectives
HIST 0555B Robber Barons
HIST 0556A Sport in American History

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

HIST 0557A Slavery and Historical Memory in the United States
HIST 0557B Slavery, Race, and Racism
HIST 0559A Culture and U.S. Empire
HIST 0559B Asian Americans and Third World Solidarity
HIST 0574A The Silk Road, Past and Present
HIST 0577A The Chinese Diaspora: A History of Globalization
HIST 0580M The Age of Revolutions, 1760-1824
HIST 0580O Making Change: Nonviolence in Action
HIST 0582A Animal Histories
HIST 0582B Science and Society in Darwin’s England

HIST 1211 Crusaders and Cathedrals, Deviants and Dominance: Europe in the High Middle Ages
HIST 1212 Charlemagne and the Making of Medieval Europe
HIST 1230A Revolution and Romanticism in 19th century Europe
HIST 1230B Modern European Intellectual and Cultural History: The Fin de Siecle, 1880-1914
HIST 1230C The Search for Renewal in 20th century Europe
HIST 1235A Making A "Second Sex": Women and Gender in Modern European History
HIST 1240A Politics of Violence in 20C Europe
HIST 1260D Living Together: Muslims, Christians, and Jews in Medieval Iberia
HIST 1262M Truth on Trial: Justice in Italy, 1400-1800
HIST 1266C English History, 1529-1660
HIST 1266D British History, 1660-1800
HIST 1268A The Rise of the Russian Empire
HIST 1268B Russia in the Era of Reforms, Revolutions, and World Wars
HIST 1268C The Collapse of Socialism and the Rise of New Russia
HIST 1270C German History, 1806-1945
HIST 1272C Liberty, Equality, Fraternity? The History of Modern France
HIST 1272D The French Revolution
HIST 1310 History of Brazil
HIST 1312 Brazil: From Abolition to Emerging Global Power
HIST 1313 Brazilian Biographies
HIST 1320 Rebel Island: Cuba, 1492-Present
HIST 1331 The Rise and Fall of the Aztecs: Mexico, 1300-1600
HIST 1332 Reform and Rebellion: Mexico, 1700-1867
HIST 1333 The Mexican Revolution
HIST 1370 The United States and Brazil: Tangled Relations
HIST 1381 Latin American History and Film: Memory, Narrative and Nation
HIST 1440 The Ottomans: Faith, Law, Empire
HIST 1455 The Making of the Modern Middle East
HIST 1460 Modern Turkey: Empire, Nation, Republic
HIST 1501 The American Revolution
HIST 1503 Antebellum America and the Road to Civil War
HIST 1505 Making America Modern
HIST 1507 American Politics and Culture Since 1945
HIST 1511 Sinners, Saints, and Heretics: Religion in Early America
HIST 1512 First Nations: The People and Cultures of Native North America to 1800
HIST 1513 U.S. Cultural History from Revolution to Reconstruction
HIST 1514 Capitalism, Slavery and the Economy of Early America
HIST 1515 American Slavery
HIST 1530 The Intimate State: The Politics of Gender, Sex, and Family in the U.S., 1873-Present
HIST 1531 Political Movements in Twentieth-Century America

COURSES WITH NUMBERS 1000-1999

HIST 1030 Southern African Entanglements: Class, Gender, Race, and Species since 1870
HIST 1060 Africa, c.1850-1946: Colonial Contexts and Everyday Experiences
HIST 1070 "Modern" Africa
HIST 1101 Chinese Political Thought from Confucius to Xi Jinping
HIST 1108 Humanitarianism and Conflict in Africa
HIST 1110 Imperial China/China: Culture and Legacy
HIST 1118 China’s Late Empires
HIST 1121 The Modern Chinese Nation: An Idea and Its Limits
HIST 1122 China Pop: The Social History of Chinese Popular Culture
HIST 1140 Samurai and Merchants, Prostitutes and Priests: Japanese Urban Culture in the Early Modern Period
HIST 1149 Imperial Japan
HIST 1150 Modern Japan
HIST 1155 Japan's Pacific War: 1937-1945
HIST 1200B The Fall of Empires and Rise of Kings: Greek History to 478 to 323 BCE
HIST 1200C History of Greece: From Alexander the Great to the Roman Conquest
HIST 1201A Roman History I
HIST 1201B Roman History II: The Empire
HIST 1202 Formation of the Classical Heritage: Greeks, Romans, Jews, Christians, and Muslims
HIST 1205 The Long Fall of the Roman Empire
HIST 1210A The Viking Age

Sophomore Seminars

HIST 0621B The Search for King Arthur
HIST 0623A British Social History
HIST 0623M Becoming French: Minorities and the Challenges of Integration in the French Republic
HIST 0637A History of Jews in Brazil
HIST 0654A Welfare States and a History of Modern Life
HIST 0654B American Patriotism in Black and White
HIST 0658D Walden + Woodstock: The American Lives of Ralph Waldo Emerson and Bob Dylan
HIST 0685A The Social Lives of Dead Bodies in China and Beyond

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>HIST 1532</td>
<td>Black Freedom Struggle Since 1945</td>
</tr>
<tr>
<td>HIST 1550</td>
<td>American Urban History, 1600-1870</td>
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<tr>
<td>HIST 1551</td>
<td>American Urban History, 1870-1965</td>
</tr>
<tr>
<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>
</tr>
<tr>
<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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<tr>
<td>HIST 1741</td>
<td>Capitalism, Land and Water: A World History: 1848 to the present</td>
</tr>
<tr>
<td>HIST 1820A</td>
<td>Environmental History</td>
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<tr>
<td>HIST 1820B</td>
<td>Environmental History of East Asia</td>
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<tr>
<td>HIST 1820G</td>
<td>Nature on Display</td>
</tr>
<tr>
<td>HIST 1825F</td>
<td>Nature, Knowledge, Power in Renaissance Europe</td>
</tr>
<tr>
<td>HIST 1825H</td>
<td>Science, Medicine and Technology in the 17th Century</td>
</tr>
<tr>
<td>HIST 1825L</td>
<td>The Roots of Modern Science</td>
</tr>
<tr>
<td>HIST 1825M</td>
<td>Science at the Crossroads</td>
</tr>
<tr>
<td>HIST 1825S</td>
<td>Science and Capitalism</td>
</tr>
<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

<table>
<thead>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIST 1960Q</td>
<td>Medicine and Public Health in Africa</td>
</tr>
<tr>
<td>HIST 1961B</td>
<td>Cities and Urban Culture in China</td>
</tr>
<tr>
<td>HIST 1961E</td>
<td>Medieval Kyoto - Medieval Japan</td>
</tr>
<tr>
<td>HIST 1961I</td>
<td>North Korea: Past, Present, Future</td>
</tr>
<tr>
<td>HIST 1961M</td>
<td>Outside the Mainstream</td>
</tr>
<tr>
<td>HIST 1962B</td>
<td>Life During Wartime: Theory and Sources from the Twentieth Century</td>
</tr>
<tr>
<td>HIST 1962C</td>
<td>State, Religion and the Public Good in Modern China</td>
</tr>
<tr>
<td>HIST 1962D</td>
<td>The Social Lives of Dead Bodies in China and Beyond</td>
</tr>
<tr>
<td>HIST 1963G</td>
<td>Crisis and Social Justice at the End of Antiquity</td>
</tr>
<tr>
<td>HIST 1963L</td>
<td>Barbarians, Byzantines, and Berbers: Early Medieval North Africa, AD 300-1050</td>
</tr>
<tr>
<td>HIST 1963M</td>
<td>Charlemagne: Conquest, Empire, and the Making of the Middle Ages</td>
</tr>
<tr>
<td>HIST 1963Q</td>
<td>Sex, Power, and God: A Medieval Perspective</td>
</tr>
<tr>
<td>HIST 1964A</td>
<td>Age of Impostors: Fraud, Identification, and the Self in Early Modern Europe</td>
</tr>
<tr>
<td>HIST 1964B</td>
<td>The Enchanted World: Magic, Angels, and Demons in Early Modern Europe</td>
</tr>
<tr>
<td>HIST 1964D</td>
<td>Women in Early Modern England</td>
</tr>
<tr>
<td>HIST 1964E</td>
<td>The English Revolution</td>
</tr>
<tr>
<td>HIST 1964F</td>
<td>Early Modern Ireland</td>
</tr>
<tr>
<td>HIST 1964G</td>
<td>Spin, Terror and Revolution: England, Scotland and Ireland, 1660-1720</td>
</tr>
<tr>
<td>HIST 1965B</td>
<td>Fin-de-Siècle Paris and Vienna</td>
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<tr>
<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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<tr>
<td>HIST 1965E</td>
<td>Politics of the Intellectual in 20C Europe</td>
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<tr>
<td>HIST 1965L</td>
<td>Appetite for Greatness: Cuisine, Power, and the French</td>
</tr>
<tr>
<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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<tr>
<td>HIST 1965O</td>
<td>‘Naturally Chic’: Fashion, Gender, and National Identity in French History</td>
</tr>
<tr>
<td>HIST 1965Q</td>
<td>Anti-Semitism, Anti-Judaism, Anti-Zionism: Historical Connections and Disconnections</td>
</tr>
<tr>
<td>HIST 1965R</td>
<td>The Monarch in Modern Britain: Constitution and Celebrity</td>
</tr>
<tr>
<td>HIST 1966Q</td>
<td>Colonial Encounters and the Creation of Latin America</td>
</tr>
<tr>
<td>HIST 1967C</td>
<td>Making Revolutionary Cuba, 1959-Present</td>
</tr>
<tr>
<td>HIST 1967E</td>
<td>In the Shadow of Revolution: Mexico Since 1940</td>
</tr>
<tr>
<td>HIST 1967F</td>
<td>The Maya in the Modern World</td>
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<tr>
<td>HIST 1967R</td>
<td>History of Rio de Janeiro</td>
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<tr>
<td>HIST 1967T</td>
<td>History of the Andes from the Incas to Evo Morales</td>
</tr>
<tr>
<td>HIST 1968</td>
<td>Approaches to The Middle East</td>
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<tr>
<td>HIST 1968A</td>
<td>Approaches to the Middle East</td>
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<tr>
<td>HIST 1968K</td>
<td>Islam in Turkey: Rumi to the Republic</td>
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<tr>
<td>HIST 1968V</td>
<td>America and the Middle East: Social and Cultural Histories in Tandem</td>
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<tr>
<td>HIST 1969A</td>
<td>Israel-Palestine: Lands and Peoples I</td>
</tr>
<tr>
<td>HIST 1969B</td>
<td>Israel-Palestine: Lands and Peoples II</td>
</tr>
<tr>
<td>HIST 1969C</td>
<td>Debates in Middle Eastern History</td>
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<tr>
<td>HIST 1969D</td>
<td>Palestine versus the Palestinians</td>
</tr>
<tr>
<td>HIST 1969F</td>
<td>Nothing Pleases Me: Understanding Modern Middle Eastern History Through Literature</td>
</tr>
<tr>
<td>HIST 1970B</td>
<td>Enslaved! Indians and Africans in an Unfree Atlantic World</td>
</tr>
<tr>
<td>HIST 1970D</td>
<td>Problem of Class in Early America</td>
</tr>
<tr>
<td>HIST 1971D</td>
<td>From Emancipation to Obama</td>
</tr>
<tr>
<td>HIST 1972A</td>
<td>American Legal History, 1760-1920</td>
</tr>
<tr>
<td>HIST 1972E</td>
<td>Theory and Practice of Local History</td>
</tr>
<tr>
<td>HIST 1972F</td>
<td>Consent: Race, Sex, and the Law</td>
</tr>
<tr>
<td>HIST 1972G</td>
<td>Settler Colonialism + US Military Empire in the Pacific</td>
</tr>
<tr>
<td>HIST 1974A</td>
<td>The Silk Roads, Past and Present</td>
</tr>
<tr>
<td>HIST 1974B</td>
<td>War and Peace: A Global History</td>
</tr>
<tr>
<td>HIST 1974J</td>
<td>Decolonizing Minds: A People’s History of the World</td>
</tr>
<tr>
<td>HIST 1974K</td>
<td>Maps and Empires</td>
</tr>
<tr>
<td>HIST 1974M</td>
<td>Early Modern Globalization</td>
</tr>
<tr>
<td>HIST 1974S</td>
<td>The Nuclear Age</td>
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<tr>
<td>HIST 1976A</td>
<td>Native Histories in Latin America and North America</td>
</tr>
<tr>
<td>HIST 1976C</td>
<td>Animal, Vegetable, Mineral: Environmental Histories of Non-Human Actors</td>
</tr>
<tr>
<td>HIST 1976D</td>
<td>Powering the Past: The History of Energy</td>
</tr>
<tr>
<td>HIST 1976E</td>
<td>The Anthropocene: Climate Change as Social History</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**History of Art and Architecture Requirements**

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 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.

**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 Honors 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 1976G</td>
<td>Animal Histories</td>
</tr>
<tr>
<td>HIST 1976H</td>
<td>Environmental History of Latin America 1492-Present</td>
</tr>
<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>Featherly Things: An Avian Introduction to Animal Studies</td>
</tr>
<tr>
<td>HIST 1977I</td>
<td>Gender, Race, and Medicine in the Americas</td>
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<tr>
<td>HIST 1979J</td>
<td>London: 1750 to the Present</td>
</tr>
<tr>
<td>HIST 1979K</td>
<td>The Indian Ocean World</td>
</tr>
<tr>
<td>HIST 1979L</td>
<td>Urban History of Latin America</td>
</tr>
<tr>
<td>HIST 1979M</td>
<td>Piracy, Patents and Intellectual Property</td>
</tr>
<tr>
<td>HIST 1979N</td>
<td>American Charters</td>
</tr>
<tr>
<td>HIST 1979O</td>
<td>Comparative Black Power</td>
</tr>
<tr>
<td>HIST 1979P</td>
<td>History of Chinese Medicine</td>
</tr>
<tr>
<td>HIST 1979Q</td>
<td>Japanese Film and Animation of the 20th Century</td>
</tr>
<tr>
<td>HIST 1979R</td>
<td>Scientific Controversies from Creationism to Climate Change</td>
</tr>
<tr>
<td>HIST 1979S</td>
<td>History of Life Itself: Biopolitics in Modern Europe</td>
</tr>
<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>
</tr>
<tr>
<td>HIST 1979V</td>
<td>Technologies of the Soul: The History of Healing</td>
</tr>
<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>
</tr>
<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>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Two core seminar courses, numbered between HIAA 1040 and HIAA 1180:

- HIAA 0871: African American and Caribbean Art: Domestic Space
- HIAA 0871A: Art After '68
- HIAA 0871B: Revolutionay Forms: 100 Years of Art and Politics in Latin America
- HIAA 0871C: History of Rhode Island Architecture
- HIAA 0871D: Modern Architecture
- HIAA 0872: Contemporary Architecture
- HIAA 0873: Contemporary British Art: Edwardian to Contemporary
- HIAA 0874: City and Cinema
- HIAA 0875: City and Cinema

Two core seminar courses, numbered between HIAA 1040 and HIAA 1189:

- 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: 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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 required to take a course in design from the Visual Arts Department, the Rhode Island School of Design or an introduction to architectural design, necessary for a career in architecture or a related field, or to take a course 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.

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.

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.

Architectural Studies Track

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIAA 1910A</td>
<td>Providence Architecture</td>
</tr>
<tr>
<td>HIAA 1910B</td>
<td>Project Seminar: The Architecture of Bridges</td>
</tr>
<tr>
<td>HIAA 1910D</td>
<td>Water and Architecture</td>
</tr>
<tr>
<td>HIAA 1910E</td>
<td>Project Seminar for Architectural Studies Concentrators</td>
</tr>
<tr>
<td>HIAA 1920</td>
<td>Individual Study Project in the History of Art and Architecture</td>
</tr>
<tr>
<td>HIAA 1930</td>
<td>The History and Methods of Art Historical Interpretation</td>
</tr>
<tr>
<td>HIAA 1990</td>
<td>Honors Thesis</td>
</tr>
</tbody>
</table>

Four elective courses. These courses must be distributed over three of 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIAA 0010</td>
<td>From Van Eyck to Bruegel</td>
</tr>
<tr>
<td>HIAA 0020</td>
<td>Cultural History of the Netherlands in a Golden Age and a Global Age</td>
</tr>
<tr>
<td>HIAA 0030</td>
<td>Cultural History of the Netherlands in a Golden Age and a Global Age</td>
</tr>
<tr>
<td>HIAA 0040</td>
<td>Introduction to Medieval Art and Architecture</td>
</tr>
<tr>
<td>HIAA 0042</td>
<td>Islamic Art and Architecture</td>
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<tr>
<td>HIAA 0031</td>
<td>Pre-Islamic Empires of Iran</td>
</tr>
<tr>
<td>HIAA 0041</td>
<td>The Architectures of Islam</td>
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<tr>
<td>HIAA 0061</td>
<td>Baroque</td>
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<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 0070</td>
<td>Introduction to American Art: The 19th Century</td>
</tr>
<tr>
<td>HIAA 0074</td>
<td>Nineteenth-Century Architecture</td>
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<tr>
<td>HIAA 0075</td>
<td>Introduction to the History of Art: Modern Photography</td>
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<tr>
<td>HIAA 0081</td>
<td>Architecture of the House Through Space and Time</td>
</tr>
<tr>
<td>HIAA 0089</td>
<td>Contemporary Photography</td>
</tr>
</tbody>
</table>

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

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 1440B Architecture of Solitude: The Medieval Monastery
HIAA 1440D The Gothic Cathedral
HIAA 1460 Topics in Medieval Archaeology
HIAA 1550A Prints and Everyday Life in Early Modern Europe
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 1600C Italian Baroque Painting and Sculpture
HIAA 1600D The Art of Peter Paul Rubens
HIAA 1600A Bosch and Bruegel: Art Turned the World Upside Down
HIAA 1600B Caravaggio
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 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

A project seminar from the HIAA 1910 series. This must be taken in the junior or senior year. 1, 2

HIAA 1910A Providence Architecture

One studio art course in design 3

Three elective courses. These can include other courses taught in the History of Art and Architecture department and cross-listed courses in other departments that are pertinent to architectural studies. They may also include a select number of non-cross-listed courses approved by the concentration advisor. 4, 5

Total Credits: 10

1 The two seminars cannot be replaced with independent study, honors thesis, or classes taken in other departments or universities.
2 In years where no project seminar is offered, any seminar that qualifies for architectural studies can become the starting point for a senior project.
3 The studio course may be taken at Brown, RISD, Harvard Career Discovery and similar six week + summer programs.
4 The non-cross-listed courses include but are not limited to MATH 0090, MATH 0100, PHYS 0030, PHYS 0040, ENGN 0030, Urban Studies and Engineering courses, and scenic design and technical production courses offered by the department of Theatre Arts and Performance Studies.

5 A maximum of two credits may be awarded for courses taken at other universities or for courses that count toward a second concentration.

No concentration credit is awarded for high school AP/IA-level courses or for language courses.

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 language department (Students who declared their concentration before August 2013 are expected to demonstrate proficiency at the 0400 level).

Self Assesment

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 1980 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 (exceptions to be determined in consultation with the instructor), not counting bibliography and visual 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 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

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advance with potential advisors. No honors student may take more than four classes either semester of their senior year—being considered one of your four classes. 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 Honor Program in History 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**

The Independent Concentration 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." The IC proposal process consists of: 1) Meeting with the Curricular Resource Center's IC Peer Coordinators (https://www.brown.edu/academics/college/advising/curricular-resource-center/meet-crccers); 2) Completing a draft IC Application (https://www.brown.edu/academics/college/advising/curricular-resource-center/independent-concentrations/ic-proposal-submission/ic-proposal) and soliciting feedback from the Peer Coordinators; 3) Identifying an approved Faculty Sponsor (an advisor) and obtaining a letter of support (http://brown.edu/academics/college/advising/curricular-resource-center/sites/brown.edu.academics.college.advising.curricular-resource-center/files/uploads/IC_FacultyAdvisorInfoSheet.docx); and 4) Submitting the application and letter of support by the deadline (Optional: Students interested in pursuing honors should read the IC Honors Thesis Guidelines (https://www.brown.edu/academics/college/advising/curricular-resource-center/independent-concentrations/independent-concentrations/resources-current-icors)).

Deadlines: The IC subcommittee of the College Curriculum Council reviews proposals six times per year; applicants must have satisfied two requirements: (1) submission of their first IC proposal by the end of their 5th semester; (2) meeting with at least one of the IC Peer Co-Coordinators before submitting their proposal.

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**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0110</td>
<td>Anthropology and Global Social Problems: Environment, Development, and Governance</td>
</tr>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
</tr>
<tr>
<td>HIST 1121</td>
<td>The Modern Chinese Nation: An Idea and Its Limits</td>
</tr>
<tr>
<td>POLS 0400</td>
<td>Introduction to International Politics</td>
</tr>
</tbody>
</table>

**Track Requirements (five courses distributed between the sub-themes):**

| Governance and Diplomacy (two or three courses): |
|--------------|---|
| CSCS 1800 | Cybersecurity and International Relations |
| FREN 1900H | La France en guerre |
| HMAN 1971T | Law, Nationalism, and Colonialism |
| INTL 1443 | History of American Intervention |
| INTL 1700 | International Law |
| INTL 1802Q | Iran and the Islamic Revolution |
| INTL 1802V | Diplomacy, Economics & Influence |
| INTL 1804B | Computers, Freedom and Privacy: Current Topics in Law and Policy |
| POLS 1020 | Politics of the Illicit Global Economy |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Students may choose from the following:

- Must be taken senior year.
- Must incorporate language skills.
- Capstone Course, from the following options:
  - Region.
  - Three years university study or equivalent. Must correspond to Language to link these to language study.
  - Both courses must be on the same area. Students are required to link these to language study.

**Political Economy 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</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0110</td>
<td>Anthropology and Global Social Problems: Environment, Development, and Governance</td>
</tr>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
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<td>Understanding the Middle East: 1800s to the Present</td>
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<tr>
<td>HIST 1121</td>
<td>The Modern Chinese Nation: An Idea and Its Limits</td>
</tr>
<tr>
<td>POLS 0400</td>
<td>Introduction to International Politics</td>
</tr>
</tbody>
</table>

**Track Requirements (five courses from distributed between the sub-themes):**

Economics (two or three courses): All students MUST take Micro and Macro

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECON 0510</td>
<td>Development and the International Economy</td>
</tr>
<tr>
<td>ECON 1500</td>
<td>Current Global Macroeconomic Challenges</td>
</tr>
<tr>
<td>ECON 1510</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECON 1540</td>
<td>International Trade</td>
</tr>
<tr>
<td>ECON 1550</td>
<td>International Finance</td>
</tr>
</tbody>
</table>

**Research Methods**

Prior to 7th semester, students must take one or two courses from the following approved list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1151</td>
<td>Ethnographies of the Muslim Middle East</td>
</tr>
<tr>
<td>ANTH 1940</td>
<td>Ethnographic Research Methods</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</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>
<tr>
<td>POLS 1600</td>
<td>Political Research Methods</td>
</tr>
<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>

**Regional Focus**

Both courses must be on the same area. Students are required to link these to language study.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 1904V</td>
<td>Decolonizing Minds: A People's History of the World</td>
</tr>
<tr>
<td>ANTH 1910G</td>
<td>Senior Seminar: Politics and Symbols</td>
</tr>
<tr>
<td>FREN 1900H</td>
<td>La France en guerre</td>
</tr>
<tr>
<td>HIST 1969B</td>
<td>Israel-Palestine: Lands and Peoples II</td>
</tr>
<tr>
<td>HIST 1974J</td>
<td>Decolonizing Minds: A People's History of the World</td>
</tr>
<tr>
<td>HMAN 1970K</td>
<td>Law and Religion</td>
</tr>
<tr>
<td>INTL 1802Q</td>
<td>Iran and the Islamic Revolution</td>
</tr>
<tr>
<td>INTL 1802V</td>
<td>Diplomacy, Economics &amp; Influence</td>
</tr>
<tr>
<td>INTL 1802W</td>
<td>International Journalism: Foreign Reporting in Practice</td>
</tr>
<tr>
<td>INTL 1802Y</td>
<td>India in the World</td>
</tr>
<tr>
<td>INTL 1803G</td>
<td>Global Women’s Issues: Investing in women as strategy for sustainable growth and global development</td>
</tr>
<tr>
<td>INTL 1803K</td>
<td>Media Wars: The Middle East</td>
</tr>
<tr>
<td>INTL 1803L</td>
<td>Humanitarianism in Uniform</td>
</tr>
<tr>
<td>INTL 1803M</td>
<td>Reassessing Contention Politics, and Social Movements</td>
</tr>
<tr>
<td>INTL 1803N</td>
<td>The Politics of Food Security</td>
</tr>
<tr>
<td>POLS 1821L</td>
<td>International Relations of Russia, Europe and Asia</td>
</tr>
<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>
</tr>
<tr>
<td>POLS 1822U</td>
<td>War and Human Rights</td>
</tr>
<tr>
<td>POLS 1822X</td>
<td>Technology and International Politics</td>
</tr>
<tr>
<td>POLS 1823Q</td>
<td>Democratic Theory and Globalization</td>
</tr>
<tr>
<td>POLS 1824B</td>
<td>Post Conflict Politics</td>
</tr>
</tbody>
</table>

**Total Credits**

14

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

ITAL 0550  Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany (HIAA 0550)
ITAL 0560  Constructing the Eternal City: Popes and Pilgrims in Renaissance Rome (HIAA 0560)
ITAL 0600  Advanced Italian II
ITAL 0750  Truth on Trial: Justice in Italy
ITAL 0751  When Leaders Lie: Machiavelli in International Context
ITAL 0950  Introduction to Italian Cinema: Italian Film and History
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 0951</td>
<td>The Grand Tour, or a Room with a View: Italy and the Imagination of Others</td>
</tr>
<tr>
<td>ITAL 0981</td>
<td>When Leaders Lie: Machiavelli in International Context</td>
</tr>
<tr>
<td>ITAL 0985</td>
<td>Visions of War: Representing Italian Modern Conflicts</td>
</tr>
<tr>
<td>ITAL 1000A</td>
<td>Luigi Pirandello: Masks and Society</td>
</tr>
<tr>
<td>ITAL 1000B</td>
<td>Reading Recent Italian Fiction</td>
</tr>
<tr>
<td>ITAL 1000C</td>
<td>Nord - Sud e Identità Italiana</td>
</tr>
<tr>
<td>ITAL 1000D</td>
<td>Italian National Identity: Criticisms and Crises</td>
</tr>
<tr>
<td>ITAL 1000E</td>
<td>Masterpieces of Italian Cinema - Capolavori del cinema italiano</td>
</tr>
<tr>
<td>ITAL 1000F</td>
<td>20th Century Italian Poetry</td>
</tr>
<tr>
<td>ITAL 1000G</td>
<td>Italian Identity</td>
</tr>
<tr>
<td>ITAL 1010</td>
<td>Dante in English Translation: Dante's World and the Invention of Modernity</td>
</tr>
<tr>
<td>ITAL 1020</td>
<td>Boccaccio's Decameron</td>
</tr>
<tr>
<td>ITAL 1029</td>
<td>World Cinema in a Global Context</td>
</tr>
<tr>
<td>ITAL 1030A</td>
<td>Fellini</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>ITAL 1340</td>
<td>The Panorama and 19th-Century Visual Culture</td>
</tr>
<tr>
<td>ITAL 1350A</td>
<td>Italian Mysteries and the New Italian Epic</td>
</tr>
<tr>
<td>ITAL 1350B</td>
<td>Non Fiction</td>
</tr>
<tr>
<td>ITAL 1360</td>
<td>Renaissance Italy</td>
</tr>
<tr>
<td>ITAL 1380</td>
<td>Italy: From Renaissance to Enlightenment</td>
</tr>
<tr>
<td>ITAL 1390</td>
<td>Modern Italy</td>
</tr>
<tr>
<td>ITAL 1400A</td>
<td>&quot;Italian (Mediterranean) Orientalisms&quot; Major Italian Writers and Filmmakers</td>
</tr>
<tr>
<td>ITAL 1400B</td>
<td>Fascism and Antifascism: Culture and Literature between the Two World Wars</td>
</tr>
<tr>
<td>ITAL 1400C</td>
<td>Literature and Adolescence</td>
</tr>
<tr>
<td>ITAL 1400D</td>
<td>Photography and Literature: Italian Examples of an Uncanny Relationship</td>
</tr>
<tr>
<td>ITAL 1400F</td>
<td>Twentieth Century Italian Culture</td>
</tr>
<tr>
<td>ITAL 1400H</td>
<td>Early Modern Italy</td>
</tr>
<tr>
<td>ITAL 1400I</td>
<td>Rituals, Myths and Symbols</td>
</tr>
<tr>
<td>ITAL 1400J</td>
<td>The Many Faces of Casanova</td>
</tr>
<tr>
<td>ITAL 1400K</td>
<td>Italy as Other</td>
</tr>
<tr>
<td>ITAL 1400L</td>
<td>History of Masculinity and Femininity from the Unification to 1968</td>
</tr>
<tr>
<td>ITAL 1400M</td>
<td>Giorgio Agamben and Radical Italian Theory</td>
</tr>
<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>
</tr>
<tr>
<td>ITAL 1420</td>
<td>Sex and the Cities: Venice, Florence, and Rome, 1450-1800</td>
</tr>
<tr>
<td>ITAL 1430</td>
<td>Popular Culture, 1400 - 1800</td>
</tr>
<tr>
<td>ITAL 1431</td>
<td>Truth on Trial: Justice in Italy, 1400-1800 (HIST 1262M)</td>
</tr>
<tr>
<td>ITAL 1550</td>
<td>Italian Representations of the Holocaust</td>
</tr>
<tr>
<td>ITAL 1550B</td>
<td>Topics in the Early History of Printmaking: Festival and Carnival (HIAA 1550B)</td>
</tr>
<tr>
<td>ITAL 1560A</td>
<td>Italy and the Mediterranean (HIAA 1560A)</td>
</tr>
<tr>
<td>ITAL 1580</td>
<td>Word, Image and Power in Renaissance Italy</td>
</tr>
<tr>
<td>ITAL 1590</td>
<td>Word, Media, Power in Modern Italy</td>
</tr>
<tr>
<td>ITAL 1610</td>
<td>The Divina Commedia: Inferno and Purgatorio</td>
</tr>
<tr>
<td>ITAL 1620</td>
<td>The Divina Commedia: Dante's Paradiso: Justifying a Cosmos</td>
</tr>
<tr>
<td>ITAL 1920</td>
<td>Independent Study Project (Undergraduate)</td>
</tr>
<tr>
<td>ITAL 1990</td>
<td>Senior Conference</td>
</tr>
<tr>
<td>ITAL 2100</td>
<td>Introduction to Italian Studies</td>
</tr>
</tbody>
</table>

**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.

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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.

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

A Capstone experience 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 adviser and faculty mentor, may appeal up to two additional Hebrew language courses (HEBR 0300, HEBR 0400, or HEBR 0500) to the additional four required courses for 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 Israeli 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 consultation 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 determined 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 be held, the decision reached, and the candidate informed before the Registrar's deadline for that semester.

Further Information
Students who are interested in further information about the concentration should contact the Judaic Studies Office at 163 George Street to make an appointment with the undergraduate concentration advisor. [Tel: 401.663.3912] or Judaic@brown.edu.

Latin American and Caribbean Studies

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 internships / 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

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 or 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 also 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 concentrators 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>Required Courses</th>
<th>AND one of:</th>
<th>One course in Psycholinguistics to be drawn from the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 0030 Introduction to Linguistic Theory (may be waived in special instances)</td>
<td>CLPS 1310 Introduction to Phonological Theory</td>
<td>CLPS 1341 Lexical Semantics</td>
<td>CLPS 0800 Language and the Mind</td>
</tr>
<tr>
<td>CLPS 1330 Introduction to Syntax</td>
<td></td>
<td>CLPS 1342 Formal Semantics</td>
<td>CLPS 1650 Child Language Acquisition</td>
</tr>
<tr>
<td></td>
<td>CLPS 1370 Introduction to Pragmatics</td>
<td>CLPS 1800 Language Processing</td>
<td>CLPS 1820 Language and the Brain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLPS 1821 Neuroimaging and Language</td>
<td>CLPS 1890 Laboratory in Psycholinguistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or any Topics Course in Language Acquisition or Language Processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 additional appropriate electives forming a thematically related set</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>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 standardly count towards the Linguistics Concentration (provided they form part of the thematically related set) is appended below.</td>
</tr>
</tbody>
</table>

Advanced Courses

- CLPS 1320 The Production, Perception, and Analysis of Speech
- CLPS 1332 Issues in Syntactic Theory
- CLPS 1342 Formal Semantics
- CLPS 1360 Introduction to Corpus Linguistics
- A course from the 1381 series (Topics in Phonetic & Phonology)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
A course from the 1383 series (Topics in Syntax and Semantics). For example:

CLPS 1383D  Topics in Syntax and Semantics

A course from the 1385 series (Topics in Language Acquisition)

A course from the 1387 series (Topics in Neurolinguistics)

A course from the 1389 series (Topics in Language Processing)

CLPS 1390  Linguistic Field Methods

CLPS 1821  Neuroimaging and Language

CLPS 1880 series (Topics in Psycholinguistics)

CLPS 1890  Laboratory in Psycholinguistics

Other Courses Routinely Fulfilling Linguistics Concentration Requirements (in consultation with the Concentration Advisor):

NOTE: This is NOT an exhaustive list of courses that can be applied towards the Linguistics Concentration requirements.

ANTH 0800  Sound and Symbols: Introduction to Linguistic Anthropology

ANTH 1800  Sociolinguistics, Discourse and Dialogue

CLPS 0050M  Playing with Words: The Linguistic Principles Behind Word Games and Puzzles

CLPS 1365  Introduction to Historical Linguistics

CSCI 1460  Computational Linguistics

EAST 1510  Chinese: A History of the Language

EGYT 2310  History of the Ancient Egyptian Language

SLAV 1300  Sociolinguistics (with Case Studies on the Former USSR and Eastern Europe)

PHIL 0540  Logic

PHIL 1760  Philosophy of Language

Total Credits 10

1 It is recommended that students take CLPS 1310 and CLPS 1330 before higher level courses.

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, playwriting, screenwriting, literary translation, electronic writing and mixed media. The concentration allows student 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 course 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 1150 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.

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

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

<table>
<thead>
<tr>
<th>Course Combination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0180 &amp; MATH 0520</td>
<td>Intermediate Calculus and Linear Algebra</td>
</tr>
<tr>
<td>MATH 0180 &amp; MATH 0540</td>
<td>Intermediate Calculus and Honors Linear Algebra</td>
</tr>
<tr>
<td>MATH 0200 &amp; MATH 0520</td>
<td>Intermediate Calculus (Physics/Engineering) and Linear Algebra</td>
</tr>
<tr>
<td>MATH 0350 &amp; MATH 0540</td>
<td>Honors Calculus and Honors Linear Algebra</td>
</tr>
</tbody>
</table>

Or the equivalent

**Program:**

- MATH 1530: Abstract Algebra 1
- Five other 1000- or 2000-level Mathematics courses 5
- Total Credits 8

**Standard program for the Sc.B. degree**

**Prerequisites:**
Multivariate calculus and linear algebra (choose one of the following sequences):

<table>
<thead>
<tr>
<th>Course Combination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0180 &amp; MATH 0520</td>
<td>Intermediate Calculus and Linear Algebra</td>
</tr>
<tr>
<td>MATH 0180 &amp; MATH 0540</td>
<td>Intermediate Calculus and Honors Linear Algebra</td>
</tr>
<tr>
<td>MATH 0200 &amp; MATH 0520</td>
<td>Intermediate Calculus (Physics/Engineering) and Linear Algebra</td>
</tr>
<tr>
<td>MATH 0350 &amp; MATH 0540</td>
<td>Honors Calculus and Honors Linear Algebra</td>
</tr>
</tbody>
</table>

Or the equivalent

**Program:**

- MATH 1130: Functions of Several Variables 2
- MATH 1140: Functions Of Several Variables 2
- MATH 1260: Complex Analysis 1
- MATH 1410: Combinatorial Topology 1
- MATH 1540: Topics in Abstract Algebra 1
- Total Credits 14

**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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1130</td>
<td>Functions of Several Variables</td>
</tr>
<tr>
<td>MATH 1140</td>
<td>Functions Of Several Variables</td>
</tr>
<tr>
<td>MATH 1260</td>
<td>Complex Analysis</td>
</tr>
<tr>
<td>MATH 1410</td>
<td>Combinatorial Topology</td>
</tr>
<tr>
<td>MATH 1540</td>
<td>Topics in Abstract Algebra</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0200 or MATH 0350</td>
<td>Three semesters of Calculus to the level of MATH 0180, MATH 0200, or MATH 0350</td>
</tr>
<tr>
<td>MATH 0520 &amp; MATH 0540</td>
<td>Linear Algebra and Honors Linear Algebra</td>
</tr>
</tbody>
</table>

**Core Courses**

- MATH 1530: Abstract Algebra 1
- Select one of the following series: 2
  
  **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 CS course
  
  - CSCI 0320: Introduction to Software Engineering or CSCI 0330: Introduction to Computer Systems
  
  - CSCI 0220: Introduction to Discrete Structures and Probability or CSCI 1010: Theory of Computation
  
  - Three 1000-level Mathematics courses 3
  
  - Three advanced courses in Computer Science 3
  
  - Three additional courses different from any of the above chosen from Mathematics, Computer Science, Applied Mathematics, or related areas 3
  
  - A capstone course in Computer Science or Mathematics 1

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Note: CSCI 1450 may be used either in place of CSCI 220 or 1010 in the core courses 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 1655 may be used in place of CSCI 1450. However, concentration credit will be given for only one of Applied Math 1650, Applied Math 1655, and CSCI 1450.

Total Credits 19

1 These courses must be at the 1000-level or higher. The three courses must include a pair of courses with 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 the pairs on this list, but any pair not on the list must be approved by the director of undergraduate studies.

2 These must be approved by a concentration advisor.

3 A one-semester course, normally taken in the student's last undergraduate year, in which the student (or group of students) uses 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.

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? 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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics</td>
<td>1</td>
</tr>
<tr>
<td>(Mathematical)</td>
<td></td>
<td></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>Two courses from the &quot;mathematical-economics&quot; group</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ECON 1170</td>
<td>Welfare Economics and Social Choice Theory</td>
<td>2</td>
</tr>
</tbody>
</table>

Mathematics

Calculus: MATH 0180 or higher

Linear Algebra - one of the following:

- MATH 0520 | Linear Algebra |
- MATH 0540 | Honors Linear Algebra |

Probability Theory - one of the following:

- MATH 1610 | Probability |
- MATH 1620 | Mathematical Statistics |

Analysis - one of the following:

- MATH 1010 | Analysis: Functions of One Variable |
- MATH 1130 | Functions of Several Variables |
- MATH 1140 | Functions Of Several Variables |

Differential Equations - one of the following:

- MATH 1110 | Ordinary Differential Equations |
- MATH 1120 | Partial Differential Equations |

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>CLAS 1750T</td>
<td>Medieval Manuscript Studies: Paleography, Codicology, and Interpretation</td>
</tr>
<tr>
<td>ENGL 1000</td>
<td>Matters of Romance</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Medieval King Arthur</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Beowulf to Aphra Behn: The Earliest British Literatures</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Prose Sagas of the Medieval North</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Chaucer</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Chaucer: The Canterbury Tales</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>Sagas Without Borders: Multilingual Literatures of Early England</td>
</tr>
<tr>
<td>ENGL 0000</td>
<td>From Mead-Hall to Mordor: The Celtic and Germanic Roots of Tolkien’s Fiction</td>
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<tr>
<td>ENGL 0000</td>
<td>Quest, Vision, Diaspora: Medieval Journey Narratives</td>
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<tr>
<td>ENGL 0000</td>
<td>Middle English Literature</td>
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<tr>
<td>ENGL 0000</td>
<td>Europe in the Vernacular</td>
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<tr>
<td>ENGL 0000</td>
<td>Women's Voices in Medieval Literature</td>
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<td>Medieval Manuscript Studies: Paleography, Codicology, and Interpretation</td>
</tr>
<tr>
<td>HIST 0000</td>
<td>Manuscript, Image, and the Middle English Text</td>
</tr>
<tr>
<td>GREK 0000</td>
<td>Greek Erotic Literature: From Plato to the Medieval Romances</td>
</tr>
<tr>
<td>GREK 0000</td>
<td>Rhetors and Philosophers: Intellectual Thought and Sophistic Style in the Ancient World</td>
</tr>
<tr>
<td>GREK 0000</td>
<td>Greek Palaeography and Premodern Book Cultures</td>
</tr>
<tr>
<td>HIAA 0000</td>
<td>Toward a Global Late Antiquity: 200-800 CE</td>
</tr>
<tr>
<td>HIAA 0000</td>
<td>Muslims, Jews and Christians in Medieval Iberia</td>
</tr>
<tr>
<td>HIAA 0000</td>
<td>Architecture of Solitude: The Medieval Monastery</td>
</tr>
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<td>Living Together: Muslims, Christians, and Jews in Medieval Iberia</td>
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<td>HIST 0000</td>
<td>Crusaders and Cathedrals, Deviants and Dominance: Europe in the High Middle Ages</td>
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<tr>
<td>HIST 0000</td>
<td>Early Modern Globalization</td>
</tr>
<tr>
<td>HIST 0000</td>
<td>New Perspectives on Medieval History</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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<td>CLAS 1750L</td>
<td>Erotic Desire in the Premodern Mediterranean</td>
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<tr>
<td>COLT 0510K</td>
<td>The 1001 Nights</td>
</tr>
<tr>
<td>COLT 1813P</td>
<td>Captive Imaginations: 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 Literatures</td>
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<td>ENGL 1311L</td>
<td>From Mead-Hall to Mordor: The Celtic and Germanic Roots of Tolkien’s Fiction</td>
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<td>Middle English Literature</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>
</tr>
<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>
<tr>
<td>GREEK 2110F</td>
<td>Greek Palaeography and Premodern Book Cultures</td>
</tr>
<tr>
<td>HIAA 0321</td>
<td>Toward a Global Late Antiquity:200-800 CE</td>
</tr>
<tr>
<td>HIAA 0460</td>
<td>Muslims, Jews and Christians in Medieval Iberia</td>
</tr>
<tr>
<td>HIAA 1440B</td>
<td>Architecture of Solitude: The Medieval Monastery</td>
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<tr>
<td>HISP 2030D</td>
<td>Fifteenth-Century Sentimental Romances and Celestina</td>
</tr>
<tr>
<td>HIST 0150B</td>
<td>The Philosophers’ Stone: Alchemy From Antiquity to Harry Potter</td>
</tr>
<tr>
<td>HIST 0521A</td>
<td>Christianity in Conflict in the Medieval Mediterranean</td>
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<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>

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 (693-1994).

Late Antique Cultures Track

Requirements:

One course in Roman history:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 course at the advanced level (numbered at least 1000) in one approved language

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATN 1110F</td>
<td>Fortunatus</td>
</tr>
<tr>
<td>LATN 1110H</td>
<td>Literature at the Court of Charlemagne</td>
</tr>
<tr>
<td>LATN 1120C</td>
<td>Survey of Late and Medieval Latin</td>
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<tr>
<td>LATN 1120D</td>
<td>Alcuin</td>
</tr>
<tr>
<td>MDVL 0360</td>
<td>Cities: Medieval Perspectives</td>
</tr>
<tr>
<td>MDVL 0620</td>
<td>Muslims, Jews, and Christians in Medieval Iberia</td>
</tr>
</tbody>
</table>

MDVL 1970 Independent Study

MDVL 1990 Honors Thesis

PHIL 1100C Medieval Arabic Philosophy

RELS 0025 Wealth: Religious Approaches

RELS 0110 Christian Classics

RELS 0150 Islam Unveiled

RELS 0290D Islamic Sexualities

RELS 0410 Christianity in Late Antiquity

RELS 0640 Dying To Be With God: Jihad, Past and Present

RELS 1300 Ancient Christianity and the Sensing Body

RELS 1520 Pilgrimage and Sacred Travel in the Lands of Islam

RELS 1530A Methods and Problems in Islamic Studies: Narratives

RELS 1530D Medieval Islamic Sectarianism

One course in Medieval literature:

<table>
<thead>
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<td>The Philosopher’s Stone: Alchemy from Antiquity to Harry Potter</td>
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<tr>
<td>ENGL 1360H</td>
<td>Crusaders and Cathedrals, Deviants and Dominance: Europe in the High Middle Ages</td>
</tr>
</tbody>
</table>

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.
Effective for the Class of 2020

Standard Program for the AB Degree -
for MES concentrators who wish to understand this region and to engage

stream of post-docs and visiting professors offer unparalleled opportunities
diversity and complexity of the human experience. A growing number
religion, politics, culture, literature, modern media, philosophy or practices
regardless of one's passions – whether history, upon courses offered by a distinguished core faculty in the humanities
Middle East Studies (MES) is an interdisciplinary concentration that draws
reader to be determined in consultation with the advisor.
sequence (under the supervision of a director and a second
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 Studies. Accepted candidates write the thesis in a two-semester course sequence (MDVL 1990) under the supervision of a director and a second reader to be determined in consultation with the advisor.

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>
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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 1974M</td>
<td>Early Modern Globalization</td>
</tr>
<tr>
<td>HIST 2970A</td>
<td>New Perspectives on Medieval History</td>
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<tr>
<td>JUDS 0050M</td>
<td>Difficult Relations? Judaism and Christianity from the Middle Ages until the Present</td>
</tr>
<tr>
<td>JUDS 0681</td>
<td>Great Jewish Books</td>
</tr>
<tr>
<td>JUDS 1630</td>
<td>The Talmud</td>
</tr>
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<td>LATN 1110F</td>
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<tr>
<td>MDVL 1970</td>
<td>Independent Study</td>
</tr>
<tr>
<td>MDVL 1990</td>
<td>Honors Thesis</td>
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<td>PHIL 1100C</td>
<td>Medieval Arabic Philosophy</td>
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<td>RELS 0025</td>
<td>Wealth: Religious Approaches</td>
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<td>RELS 0110</td>
<td>Christian Classics</td>
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<tr>
<td>RELS 0150</td>
<td>Islam Unveiled</td>
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<tr>
<td>RELS 0290D</td>
<td>Islamic Sexualities</td>
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<tr>
<td>RELS 1530D</td>
<td>Medieval Islamic Sectarianism</td>
</tr>
<tr>
<td>MES 0155</td>
<td>Cultures of the Contemporary Middle East</td>
</tr>
<tr>
<td>or ANTH 1151</td>
<td>Ethnographies of the Muslim Middle East</td>
</tr>
<tr>
<td>MES 1200</td>
<td>Ways of Seeing: The Arab World in Global Perspective</td>
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<tr>
<td>COLT 0812H</td>
<td>Literary Bestsellers of the Islamic World</td>
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<tr>
<td>HIST 0240</td>
<td>Middle East Beginnings</td>
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<tr>
<td>HIST 0243</td>
<td>Modern Middle East Roots: 1492 to the Present</td>
</tr>
<tr>
<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
</tr>
<tr>
<td>HIST 0247</td>
<td>Civilization, Empire, Nation: Competing Histories of the Middle East</td>
</tr>
<tr>
<td>HIST 1455</td>
<td>The Making of the Modern Middle East</td>
</tr>
<tr>
<td>RELS 0150</td>
<td>Islam Unveiled</td>
</tr>
<tr>
<td>POLS 1270</td>
<td>Middle East Politics</td>
</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:

1. 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
2. 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.

Total Credits: 12

Middle East Beginnings
Perspective
Ways of Seeing: The Arab World in Global Perspective
Ethnographies of the Muslim Middle East

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Language Semesters: Basic competence in at least one of the modern Middle Eastern languages is required. This entails taking at least four semesters of coursework in one of the modern Middle Eastern languages such as Arabic, Persian, Hebrew, Turkish, etc. 1

Electives: Four courses chosen from the list of courses that are cross-listed by Middle East Studies and approved by the Concentration advisor. Students should aquire 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:

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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 2

c. An Honors Thesis

Total Credits 12

1 Honors students will be required to have at least six semesters of language study (Advanced), two semesters of which may be counted toward the elective requirement. 
2 Two semesters of Independent Study (MES 1970) are required for honors and will raise the number of required courses to 13.

Honors

To be eligible for honors, students will have earned an "A" in the majority of courses for the concentration. Honors students will be required to have at least six semesters of language study (Advanced), two semesters of which may be counted toward the elective requirement. Two semesters of Independent Study (MES 1970) towards the Honors Thesis with the thesis advisor(s) are required. This is typically done during senior year and will raise the total number of required courses to 13.

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 culture that are normally separated by departmental structures such as film and media studies, fine art, literature, literary arts and philosophy. This concentration offers the student a range of possible specializations. A student might decide to focus on the critical study and production of a certain type or combination of media (print, photography, sound recording, cinema, video, television, and digital media); or they might focus on certain cultural, theoretical and/or social formations (for example, gender/sexuality in post-Cold war television, postcolonial theory and film, the changing form of the novel, theories of subjectivity and ideology, video games and theories of representation). These paths are united by a commitment to critical thinking/practice: rather than reproducing conventions, MCM concentrators learn how conventions emerge, what work they do, and explore ways to change them.

Track I

Track I concentrators may choose to study a particular historical moment, a medium, or a mode of textual production, in combination with theoretical 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>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MCM 0150</td>
<td>Text/Media/Culture: Theories of Modern</td>
</tr>
<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>

Select two of the following: 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 1970</td>
<td>Independent Study (MES-coded or X-Listed)</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. 2

Total Credits 11

1 No more than three courses from this list may count for concentration requirements.
2 The specific courses must be approved by an MCM concentration advisor as part of a coherent program of study.

Other Requirements:

1. Focus Area: Of the 11 courses required for the concentration, at least 3 courses must be in a focus area approved by a concentration advisor. These courses may be MCM courses, related courses, or a combination of the two, and they must represent a focus on some aspect of modern literature, theory, media, art or culture. Examples of possible focus areas are: mass/popular culture, gender/sexuality, language/representation/subjectivity, narrative, digital media, film, modern thought, television, the modern arts, the novel, colonialism and post-colonialism. This is not an exhaustive list. Production courses may be in the focus area but must be in addition to the minimum 3 courses.

2. Production: Work in production is encouraged but not required for Track I concentrators. Of the 11 courses required for concentration, as many as 3 may be in production. These may be production courses offered by MCM (film, video, digital media) or courses in creative writing, painting, photography, journalism, etc., provided they do not bring the total number of concentration courses taken outside MCM to more than 3.

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 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.

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

- **Two core courses:**
  - MCM 0150 Text/Media/Culture: Theories of Modern Culture and Media 1
  - MCM 0710 Introduction to Filmic Practice: Time and Form 1

- **Select one of the following Introductory Practice or History of a Medium courses:**
  - MCM 0730 Introduction to Video Production: Critical Strategies and Histories 1
  - VISA 0100 Studio Foundation 1
  - VISA 0110 Advanced Studio Foundation 1
  - VISA 0120 Foundation Media: Sound and Image 1
  - MUSC 0200 Computers and Music 1
  - MUSC 0210 Introduction to Object-Oriented Programming and Computer Science 1

  A course from the LITR 0110 series 1

  A course from the LITR 0210 series 1

- **One additional course from the following:**
  - MCM 0220 Print Cultures: Textuality and the History of Books 1
  - MCM 0230 Digital Media 1
  - MCM 0240 Television Studies 1
  - MCM 0250 Visuality and Visual Theories 1
  - MCM 0260 Cinematic Coding andNarrativity 1
  - MUSC 1110 The Theory of the Sign 1

  Three additional courses from the MCM 1200 or MCM 1500 series 1

  Four practice courses selected in consultation with an advisor. 2 4

  One Senior Seminar from the MCM 1700 series or other 1 equivalent in production 1

**Total Credits:** 11

1 At least one must be from the MCM 1500 series.
2 Courses can be in any medium or combinatory sequence of media from the following departments: Modern Culture and Media, Visual Art, Music, Literary Arts, Theatre Arts and Performance Studies, Computer Science, Engineering, supplemented by approved courses at Rhode Island School of Design and study abroad. This list is not exhaustive.

**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 prerequisite 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:**

**Music Theory**

- MUSC 0550 Theory of Tonal Music (offered every fall) 1
- MUSC 0560 Theory of Tonal Music (offered every spring) 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

**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.

- MUSC 1020 Modal Counterpoint (usually offered every other fall)
- MUSC 1030 Tonal Counterpoint (usually offered every other fall)
- MUSC 1040 Analysis of Romantic Musics (usually offered every other fall)
- MUSC 1050 Advanced Music Theory II (usually offered every other fall)
- MUSC 1060 Analysis and Performance of Music

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**Computer Music and Multimedia Track:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1070</td>
<td>Music After 1945</td>
<td>1</td>
</tr>
</tbody>
</table>

**Advanced Musicianship**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1010</td>
<td>Advanced Musicianship I (offered every fall)</td>
<td>0.5</td>
</tr>
<tr>
<td>MUSC 1011</td>
<td>Advanced Musicianship II (offered every spring)</td>
<td>0.5</td>
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</tbody>
</table>

**Ethnomusicology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1900</td>
<td>Introduction to Ethnomusicology (usually offered annually)</td>
<td>1</td>
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</tbody>
</table>

**Electives:**

Three upper-level courses are required (i.e., no course below MUSC 0570): 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUSC 0910</td>
<td>Medieval and Renaissance Music</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 0920</td>
<td>Baroque and Classic Music</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 0930</td>
<td>Romantic and Modern Music</td>
<td>1</td>
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</table>

**Other Foundational Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANTH 0100</td>
<td>Introduction to Cultural Anthropology</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1900</td>
<td>Introduction to Ethnomusicology (usually offered annually)</td>
<td>1</td>
</tr>
</tbody>
</table>

**History**

Select two of the following (the third is optional): 2

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<tr>
<td>MUSC 0930</td>
<td>Romantic and Modern Music</td>
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</tr>
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</table>

**Electives in Ethnomusicology**

Four additional courses in ethnomusicology numbered 1000 or higher are required. 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NEUR 1030</td>
<td>Principles of Neurobiology</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 1030</td>
<td>Principles of Neurobiology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Brain: An Introduction to Neuroscience</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>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>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
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</table>

**Computer Music and Multimedia Track:**

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**Ethnomusicology**

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<tr>
<td>MUSC 1900</td>
<td>Introduction to Ethnomusicology (usually offered annually)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Electives:**

Four elective courses selected in any combination from the following groups: 4

- Computer Music and Multimedia courses, MUSC 1220–1290 or MUSC 2200–2290
- Theory and composition courses, MUSC 1020–1190

**Total Credits**

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>
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<tbody>
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<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>
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**Core Concentration Courses:**

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<td>NEUR 1030</td>
<td>Neural Systems</td>
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**Electives related to neuroscience**

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</tbody>
</table>

**Total Credits**

1

For a list of qualifying courses, see the Concentration Advisor.

**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.

One course in Ancient Philosophy, e.g. 1
- 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. 1
- 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. 1
- 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. 1
- PHIL 0500  Moral Philosophy
- PHIL 0560  Political Philosophy
- PHIL 1640  The Nature of Morality
- PHIL 1650  Moral Theories

One course in Logic, e.g. 1
- PHIL 0540  Logic
- PHIL 1630  Mathematical Logic
- PHIL 1880  Advanced Deductive Logic

One seminar 1
- 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 1
- 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 provide a general overview of the topic and the reading 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.

Total Credits 10

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 standardly 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: 2

- PHYS 0007 & 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
- PHYS 1530  Thermodynamics and Statistical Mechanics

One additional 1000-level course or a mathematics course beyond the introductory level.

Total Credits 8

Standard program for the Sc.B. degree

Prerequisites:

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Biological Physics Track for the Sc.B. degree

<table>
<thead>
<tr>
<th>Program:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0070</td>
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<tr>
<td>MATH 0520</td>
</tr>
<tr>
<td>or PHYS 0050</td>
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<tr>
<td>or PHYS 0160</td>
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<td>or ENGN 0040</td>
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<td>or PHYS 0060</td>
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<td>PHYS 1410</td>
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<td>PHYS 1530</td>
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</table>

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 I
- MATH 1110 Ordinary Differential Equations
- MATH 1120 Partial Differential Equations

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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Mathematical Physics Track for the A.B.

**Required courses:**
- MATH 0180 Intermediate Calculus
  - or MATH 0200 Intermediate Calculus (Physics/Engineering)
  - or MATH 0350 Honors Calculus

**Mathematics Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
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</tr>
<tr>
<td>MATH 0540</td>
<td>Honors Linear Algebra</td>
<td>1</td>
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</tbody>
</table>

**Basic Biology and Chemistry**

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or placement out of BIOL 0200)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0500</td>
<td>Cell and Molecular Biology</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
</tbody>
</table>

**Advanced Biophysical Topics and Techniques**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1610</td>
<td>Biological Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
<td>1</td>
</tr>
</tbody>
</table>

**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>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0360</td>
<td>Applied Partial Differential Equations I</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0410</td>
<td>Mathematical Methods in the Brain Sciences</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
<td>1</td>
</tr>
<tr>
<td>APMA 1070</td>
<td>Quantitative Models of Biological Systems</td>
<td>1</td>
</tr>
<tr>
<td>APMA 1080</td>
<td>Inference in Genomics and Molecular Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0280</td>
<td>Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1050</td>
<td>Biology of the Eukaryotic Cell</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1200</td>
<td>Protein Biophysics and Structure</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1270</td>
<td>Advanced Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1870</td>
<td>Techniques and Clinical Applications in Pathobiology</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>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1610</td>
<td>Probability</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1620</td>
<td>Mathematical Statistics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1510</td>
<td>Advanced Electromagnetic Theory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1560</td>
<td>Modern Physics Laboratory</td>
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</tr>
<tr>
<td>PHYS 2620F</td>
<td>Selected Topics in Molecular Biophysics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
<td>1</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 Sc.B. degree

**Prerequisites:**

Select one of the following series:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0070</td>
<td>Analytical Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0180 &amp; PHYS 0160</td>
<td>Introduction to Relativity and Quantum Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0050</td>
<td>Foundations of Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0180 &amp; PHYS 0060</td>
<td>Foundations of Electromagnetism and Modern Physics</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0090 &amp; MATH 0100</td>
<td>Introductory Calculus, Part I and Introductory Calculus, Part II</td>
<td>2</td>
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</table>

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0500</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>
<tr>
<td>MATH 0180</td>
<td>Intermediate Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0200 &amp; MATH 0350</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0540 &amp; MATH 0350</td>
<td>Honors Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1530</td>
<td>Abstract Algebra</td>
<td>1</td>
</tr>
</tbody>
</table>

Four additional 1000 or 2000 level Physics courses

Two additional 1000 or 2000 level Math courses

Total Credits: 18-20

1. A senior thesis is required. This is to be prepared in connection with under the direction of a faculty supervisor.

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.

Advising

Concentration advisors from the Departments of Physics and Philosophy will guide students working towards the A.B. degree.

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, 5 in Philosophy 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 1710, 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 0500. 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0060</td>
<td>Foundations of Electromagnetism and Modern Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0160</td>
<td>Introduction to Relativity and Quantum Physics</td>
<td>1</td>
</tr>
</tbody>
</table>

One course in Special Relativity and Classical Field Theory:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following in Methods of Experimental and Theoretical physics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0500</td>
<td>Advanced Classical Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
<td>1</td>
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</tbody>
</table>

Select one of the following in Quantum Mechanics and its applications:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>

One more 1000-level Physics course

### Philosophy Courses

Select one of the following gateway courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 0210</td>
<td>Science, Perception and Reality</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 0100</td>
<td>Critical Reasoning</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 0060</td>
<td>Modern Science and Human Values</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 0540</td>
<td>Logic</td>
<td>1</td>
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</table>

Select one of the following courses in Early Modern Philosophy:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 0360</td>
<td>Early Modern Philosophy</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1700</td>
<td>British Empiricists</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1710</td>
<td>17th Century Continental Rationalism</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1720</td>
<td>Kant: The Critique of Pure Reason</td>
<td>1</td>
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</tbody>
</table>

Select two of the following courses in Epistemology, Metaphysics and Philosophy of Science:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1590</td>
<td>Philosophy of Science</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1620</td>
<td>Philosophy of Quantum Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1660</td>
<td>Metaphysics</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1670</td>
<td>Time</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 1750</td>
<td>Epistemology</td>
<td>1</td>
</tr>
</tbody>
</table>

### History Courses

Select one of the following courses in History of Science:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 0522N</td>
<td>Reason, Revolution and Reaction in Europe</td>
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</tr>
<tr>
<td>HIST 1825M</td>
<td>Science at the Crossroads</td>
<td>1</td>
</tr>
<tr>
<td>HIST 1976I</td>
<td>The World of Isaac Newton</td>
<td>1</td>
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</table>

### Calculus

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 0160</td>
<td>Intermediate Calculus</td>
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</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0350</td>
<td>Honors Calculus</td>
<td>1</td>
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</tbody>
</table>

### Final Project

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1990</td>
<td>Independent Studies</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
<td>1</td>
</tr>
</tbody>
</table>

A course from the PHIL 0990 Senior Seminar series

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 immigration flourish? Just what is democracy? How do emotions shape our political behavior? What do war movies tell us about the USA? Would less immigration flourish? How do immigrants see the American Dream? What is the American dream?

Political science is about questions like these. You can grapple with every one of them—and many more—in the classrooms of the Brown political science department. We study how people—nations, regions, cities, communities—live their common lives. How people solve (or, in case) their common problems. How people govern themselves. How 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 by 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.

- **POLS 0010** Introduction to the American Political Process
- **POLS 0110** Introduction to Political Thought
- **POLS 0200** Introduction to Comparative Politics
- **POLS 0400** Introduction to International Politics

For the international and comparative politics track; the following two introductory courses are required:

- **POLS 0200** Introduction to Comparative Politics
- **POLS 0400** Introduction to International Politics

**One course in the American politics subfield**

**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:**

- **POLS 0500** Foundations of Political Analysis

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POBS 0610</td>
<td>Mapping Portuguese-Speaking Cultures: Brazil</td>
<td>1</td>
</tr>
<tr>
<td>POBS 0620</td>
<td>Mapping Portuguese-Speaking Cultures: Portugal and Africa</td>
<td>1</td>
</tr>
<tr>
<td>POBS 1030</td>
<td>Portuguese Stylistics: Advanced Language Study and Creative Writing</td>
<td>1</td>
</tr>
<tr>
<td>POBS 1800E</td>
<td>The Brazilian Puzzle: Confronting the Post-Colonial Legacy</td>
<td>1</td>
</tr>
<tr>
<td>or POBS 1800F</td>
<td>The Lusophone World and the Struggle for Modernity</td>
<td>1</td>
</tr>
</tbody>
</table>

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.

**Total Credits: 8**

1. One or 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.

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

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

Requirements for the A.B. degree

<table>
<thead>
<tr>
<th>STANDARD PROGRAM FOR THE A.B. DEGREE</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 0010 Mind, Brain, and Behavior</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0900 Statistical Methods</td>
<td>1</td>
</tr>
<tr>
<td>One approved course in Social/Personality, such as:</td>
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<tr>
<td>CLPS 0700 Social Psychology</td>
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<tr>
<td>CLPS 0701 Personality</td>
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<tr>
<td>CLPS 1700 Abnormal Psychology</td>
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<td>One approved course in Perception/Cognition:</td>
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<tr>
<td>CLPS 0200 Human Cognition</td>
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<tr>
<td>CLPS 0220 Making Decisions</td>
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<tr>
<td>CLPS 0500 Perception and Mind</td>
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<tr>
<td>One approved course in Development, such as:</td>
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<tr>
<td>CLPS 0600 Developmental Psychology</td>
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<tr>
<td>CLPS 0610 Children's Thinking: The Nature of Cognitive Development</td>
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<tr>
<td>One approved course in Learning/Animal Behavior/Behavioral Neuroscience, such as:</td>
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<tr>
<td>CLPS 0100 Learning and Conditioning</td>
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<tr>
<td>CLPS 0110 Animal Behavior</td>
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<tr>
<td>Four Approved Electives related to Psychology, such as:</td>
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<tr>
<td>BIOL 0480 Evolutionary Biology</td>
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<td>CLPS 1100 Animal Cognition</td>
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<td>CLPS 1150 Memory and the Brain</td>
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<td>CLPS 1200 Thinking</td>
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<tr>
<td>CLPS 1480B Cognitive Aging and Dementia</td>
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<tr>
<td>CLPS 1500 Perception and Action</td>
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<td>CLPS 1510 Auditory Perception Laboratory</td>
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<td>CLPS 1610 Cognitive Development</td>
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<td>CLPS 1650 Child Language Acquisition</td>
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<tr>
<td>CLPS 1720 Human Resilience</td>
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<tr>
<td>CLPS 1730 Psychology in Business and Economics</td>
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<tr>
<td>CLPS 1820 Language and the Brain</td>
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<tr>
<td>EDUC 1260 Emotion, Cognition, Education</td>
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<tr>
<td>PHIL 1770 Philosophy of Mind</td>
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<tr>
<td>One Independent Study or Approved Seminar, such as:</td>
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<tr>
<td>CLPS 1400 The Neural Bases of Cognition</td>
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</tbody>
</table>
Requirements Specific for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE 1

CLPS 0010  Mind, Brain, and Behavior  1
CLPS 0900  Statistical Methods  1
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 health 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)

   PHP 0310  Health Care in the United States  1
   This course is best taken as a freshman or sophomore.
   PHP 0320  Introduction to Public Health  1
   This course is a prerequisite to the Fundamentals of Epidemiology (PHP 0850) and is best taken as a freshman or sophomore.
   PHP 0850  Fundamentals of Epidemiology  1
   This course is best taken by end of junior year before PHP 1910, Senior Seminar.
   PHP 1501  Essentials of Data Analysis  1
This course is best taken by end of junior year before PHP 1910, Senior Seminar.

PHP 1910  Public Health Senior Seminar  1

This course, which is required for all non-honors students and optional for honors students, is taken as a senior. PHP 0320 and PHP 0310 are required prior to course.

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 Roles 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 Pathology to Power: Disability, Health and Community
- PHP 1680I  Introduction to Conducting Clinical Research
- PHP 1680K  The Epidemiology of Violence and its Consequences
- PHP 1680M  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 0800  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
- 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

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

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/education-training/undergraduate/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 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://waston.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:

PLCY 0100  Introduction to Public Policy
Ethics and Public Policy
POL 1050  Ethics and Public Policy
or PLCY 1700T  Good Government
Economics for Public Policy
ECON 1110  Intermediate Microeconomics
ECON 1130  Intermediate Microeconomics
(Mathematical)
EDUC 1130  Economics of Education I
Statistics for Public Policy
POL 1600  Political Research Methods
EDUC 1100  Introduction to Qualitative Research Methods
ECON 1620  Introduction to Econometrics
ECON 1630  Econometrics I
SOC 1100  Introductory Statistics for Social Research
Policy Analysis and Program Evaluation
PLCY 1200  Policy Analysis and Program Evaluation
or EDUC 1160  Evaluating the Impact of Social Programs

Elective Courses: 1, 2

Three Broad Elective Courses: May be taken in any policy area 3
Two more electives in one of the areas you have already studied 2

Sample electives may include the following:

Health Policy
PHP 1100  Comparative Health Care Systems

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

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>RELS 0015</td>
<td>Sacred Stories</td>
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<td>RELS 0022</td>
<td>Introduction to the New Testament</td>
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<td>RELS 0050</td>
<td>Love: The Concept and Practice</td>
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<td>RELS 0056</td>
<td>Spiritual But Not Religious: Making Spirituality in America</td>
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<td>RELS 0058</td>
<td>Christianity and Culture</td>
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<td>RELS 0068</td>
<td>Religion and Torture</td>
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<td>RELS 0075</td>
<td>Blues People: Topics in African American Religion and Culture</td>
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<td>RELS 0085C</td>
<td>Foreigners, Refugees, and the Ethics of Minority (JUDS 0061)</td>
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<td>RELS 0088</td>
<td>Judaism, Christianity, and Islam</td>
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<td>RELS 0090K</td>
<td>Christmas in America</td>
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<tr>
<td>RELS 0096</td>
<td>Islamic Cosmologies</td>
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<td>RELS 0155</td>
<td>Islam in South Asia</td>
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<tr>
<td>RELS 0195</td>
<td>Gender in Early Jewish and Christian Narratives</td>
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<tr>
<td>RELS 0250</td>
<td>Good and Evil</td>
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<tr>
<td>RELS 0290A</td>
<td>Humanitarian Sensibility and Its Critics</td>
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<td>RELS 0290G</td>
<td>The Ten Commandments (JUDS 0686)</td>
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<tr>
<td>RELS 0326</td>
<td>How the Bible Became Holy (JUDS 0682)</td>
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<td>RELS 0415</td>
<td>Ancient Christian Culture</td>
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<tr>
<td>RELS 0600C</td>
<td>Radical Islam (?)</td>
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<td>RELS 0835</td>
<td>Edward Said and Cornel West</td>
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<td>RELS 0880C</td>
<td>Race, Religion, and the Secular (JUDS 0603)</td>
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<tr>
<td>RELS 1050</td>
<td>Biblical History: What Really Happened? (JUDS 1635)</td>
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<td>RELS 1325D</td>
<td>Byzantine Desires</td>
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<tr>
<td>RELS 1340A</td>
<td>Roman Religion (CLAS 1410)</td>
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<tr>
<td>RELS 1375</td>
<td>Heidegger, the Jews, and the Crisis of Liberalism (JUDS 1614)</td>
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<tr>
<td>RELS 1380A</td>
<td>Money, Media, and Religion</td>
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<td>RELS 1530D</td>
<td>Medieval Islamic Sectarianism</td>
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<tr>
<td>RELS 1760</td>
<td>Religion and Suspicion</td>
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B. Traditions that emerge from South and East Asia (e.g., Buddhism, Hinduism, Daoism)

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<tr>
<td>RELS 0030</td>
<td>Sound, Song and Salvation in South Asia</td>
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<tr>
<td>RELS 0040</td>
<td>Great Contemplative Traditions of Asia</td>
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<tr>
<td>RELS 0045</td>
<td>Buddhism and Death</td>
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<td>RELS 0080</td>
<td>Japan: Nature, Ritual and the Arts</td>
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<td>RELS 0090L</td>
<td>Pilgrimage and Quest</td>
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<tr>
<td>RELS 0100</td>
<td>Introduction to Buddhism</td>
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<td>RELS 1430</td>
<td>Buddhist Classics</td>
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<td>RELS 1397</td>
<td>Classical Philosophy of India (CLAS 1140)</td>
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<tr>
<td>RELS 1425</td>
<td>Buddhist Poetry</td>
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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 restructing 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:

- **COLT 0710I** New Worlds: Reading Spaces and Places in Colonial Latin America
- **COLT 1410P** Shakespeare
- **ENGL 0100C** Altered States
- **ENGL 0150D** Shakespeare's Present Tense
- **ENGL 0201H** Green Shakespeare: Literature, Ecology, and the Nonhuman
- **ENGL 0310A** Shakespeare
- **ENGL 0310E** Shakespeare: The Screenplays
- **ENGL 1310A** Firing the Canon: Early Modern Women's Writing
- **ENGL 1310H** The Origins of American Literature
- **ENGL 1310J** Imagining the Individual in Renaissance England
- **ENGL 1360K** Shakespeare and Company
- **ENGL 1310O** Restoration and Early Eighteenth-Century Literature
- **ENGL 1360P** Shakespearean Tragedy
- **ENGL 1360S** Between Gods and Beasts: The Renaissance Ovid
- **ENGL 1360Z** Shakespeare and Embodiment
- **ENGL 1950A** Form and Feeling in Renaissance Poetry
- **ENGL 2360O** Irony and Satire
- **ENGL 2360P** Thinking with Romance in the Renaissance
- **ENGL 2360S** Alternative Miltons
- **FREN 0720A** De l'Amour courttois au désir postmoderne
- **A course from the** FREN 1040 Studies in French Literature of the Seventeenth Century series
- **FREN 2130E** Corps et esprits libertins
- **FREN 2130F** Façons d'aímer: Discourses of Sexuality in Early Modern France
- **HIAA 0062** The Age of Rubens and Rembrandt: Visual Culture of the Netherlands in the Seventeenth Century
- **HIAA 0550** Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany
- **HIAA 0560** Popes and Pilgrims in Renaissance Rome
- **HIAA 0630** Cultural History of the Netherlands in a Golden Age and a Global Age
- **HIAA 1560A** Italy and the Mediterranean
- **HIAA 1600I** Collections and Visual Knowledge in Early Modern Europe: 1400-1800
- **HISP 2160G** Don Quixote: Contexts and Constructions
- **HISP 2520I** Sor Juana Inés de la Cruz in Her Literary Context
- **HIST 0266A** History of Medicine I: Medical Traditions in the Old World Before 1700
- **HIST 1825H** Science, Medicine and Technology in the 17th Century
- **HIST 1964A** Age of Impostors: Fraud, Identification, and the Self in Early Modern Europe
- **HIST 1974M** Early Modern Globalization
- **ITAL 0981** When Leaders Lie: Machiavelli in International Context
- **ITAL 1400J** The Many Faces of Casanova
- **ITAL 1580** Word, Image and Power in Renaissance Italy
- **ITAL 2550** Gender Matters
- **JUDS 1751** Jews Between Christians and Muslims in the Early Modern World
- **LATN 2000A** Senecan Tragedy
- **POBS 0910** On the Dawn of Modernity
- **REMS 1980** Independent Study in REMS

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:

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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 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 along 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)
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:
- Be in good standing
- Have completed at least two thirds of the concentration requirements by the application deadline
- Have earned a majority of “A” grades in the concentration. Classes taken S/NC will count as qualifying towards that majority if they are marked “S with distinction” or are accompanied by a Course Performance Report (https://ask.brown.edu/performance_reports) indicating that had the student taken the course for a grade, the grade would have been an “A.”

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

- **RUSS 0100** Introductory Russian
- **RUSS 0200** and Introductory Russian
- **RUSS 0300** Intermediate Russian
- **RUSS 0400** Intermediate Russian
- **RUSS 0500** Advanced Russian
- **RUSS 0600** Advanced Russian

Summer courses offered on the Brown in Petersburg Program can enable advanced placement in academic year courses:

- **RUSS 0250** Introductory Russian in St. Petersburg
- **RUSS 0350** Intermediate Russian in St. Petersburg
- **RUSS 0550** Advanced Russian in St. Petersburg

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:

- **CZCH 0100** Introductory Czech
- **CZCH 0200** and Introductory Czech
- **CZCH 0410A** Boys and Girls: Relationships under Socialist Bohemia
- **CZCH 0410B** Coming of Age in Postwar Czechoslovakia
- **CZCH 0410C** Czech View of Self and Others
- **CZCH 0410D** Czechs and the Big Brother: Czech Lands in the 1980s
- **CZCH 0610A** Czech Lands under Occupation and Terror
- **CZCH 0610B** Psychosis of Occupation in the Czech Lands
- **CZCH 0610C** Czech Cultural Icons, Emblems, and National Identity
- **PLSH 0100** Introductory Polish
- **PLSH 0200** and Introductory Polish
- **PLSH 0300** Intermediate Polish
- **PLSH 0400** and Intermediate Polish

#### Courses in the Department of Slavic Studies:

- **RUSS 1110** Special Topics in Russian Studies I: Advanced Reading and Conversation
- **RUSS 1200** Russian Fantasy and Science Fiction
- **RUSS 1250** Russian Cinema
- **RUSS 1290** Russian Literature in Translation I: Pushkin to Dostoevsky
- **RUSS 1300** Russian Literature in Translation II: Tolstoy to Solzhenitsyn
- **RUSS 1320** Soviet Literature from 1917 to 1953
- **RUSS 1330** Soviet and Post-Soviet Literature: Propaganda, Dissidence, Underground
- **RUSS 1340** The Russian Novel
- **RUSS 1350** Putin, Russia and the New Conflict with the West: Reading Modern Russian Culture
- **RUSS 1450** Love, Adultery, and Sexuality
- **RUSS 1500** Approaches to Russian Literature
- **RUSS 1600** Literature and History: Russian Historical Imagination in the European Context
- **RUSS 1800** Pushkin
- **RUSS 1810** Tolstoy
- **RUSS 1820** Dostoevsky
- **RUSS 1840** Nabokov
- **RUSS 1860** Chekhov
- **RUSS 1900** Russian Jewish Literature and Film
- **SLAV 1300** Sociolinguistics (with Case Studies on the Former USSR and Eastern Europe)
- **SLAV 1790** Ukraine and the Idea of Central Europe in Literature

#### 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 190). 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

**Required Core**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MATH 0900 Introductory Calculus, Part I 1
SOC 1100 Introductory Statistics for Social Research 1
or APMA 0650 Essential Statistics 1
or ECON 1620 Introduction to Econometrics 1
SOC 1020 Methods of Social Research 1
SOC 2010 Multivariate Statistical Methods I 1
SOC 1010 Classical Sociological Theory 1
Three (3) substantive or theory courses (non-methodological courses) in Sociology, two (2) of which must be at the 1000-level or above 3
Three (3) of the following advanced analysis courses: 3
SOC 1120 Market and Social Surveys
SOC 1117 Focus Groups for Market and Social Research
SOC 1260 Market Research in Public and Private Sectors
SOC 1340 Principles and Methods of Geographic Information Systems
SOC 2610 Spatial Thinking in Social Science
SOC 2960G Spatial Data Analysis Techniques in the Social Sciences
SOC 2230 Techniques of Demographic Analysis
SOC 2210 Qualitative Methods
SOC 2020 Multivariate Statistical Methods II
SOC 2240 Event History Analysis
Capstone Experience (1-2 courses) 1-2
A one-semester research internship (not for credit or for credit as SOC 1970 - Independent Study), or a summer research internship (not for credit) Sociology Senior Seminar (SOC 1950)
Total Number of Courses (12-13)
Total Credits 12-13

***See the Sociology website http://www.brown.edu/academics/sociology/ for details regarding Honors and Independent Studies

Course Substitutions: Students may petition the Undergraduate Concentration Advisor to use one advanced analysis course taken in another department to count toward the three required advanced analysis courses.

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 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 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 ma 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.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
NO EXTENSIONS WILL BE GRANTED.

Honor
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 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

1. At least three of the optional courses must have to be 1000 level and one of them must be a substantive seminar (1870/1871).
2. Students can choose to take up to two (showcase) level lower level (1010 level) courses.
3. 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 1980 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

Honor
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
All South Asian Studies concentrators must take and pass 10 courses as outlined in the Course Requirements.

**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 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, Bengali, 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>
</tr>
</thead>
<tbody>
<tr>
<td>HIST1620 - Gandhi's India: South Asia Before 1947</td>
<td>1</td>
</tr>
<tr>
<td>Select at least one of the following courses in pre-modern history, philosophy, religious studies and literature:</td>
<td></td>
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<tr>
<td>CLAS 0180</td>
<td>Indian Civilization through Its Literature</td>
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<tr>
<td>CLAS 0800</td>
<td>Religious and Philosophical Thought in Ancient India</td>
</tr>
<tr>
<td>CLAS 0820</td>
<td>Epics of India</td>
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<tr>
<td>CLAS 0990</td>
<td>Concepts of the Self in Classical Indian Literature</td>
</tr>
<tr>
<td>CLAS 1140</td>
<td>Classical Philosophy of India</td>
</tr>
<tr>
<td>RELS 0140</td>
<td>Religions of South Asia</td>
</tr>
<tr>
<td>RELS 0130</td>
<td>Religions of Classical India</td>
</tr>
<tr>
<td>Select at least one of the following social science courses:</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 1250</td>
<td>Film and Anthropology: Identity and Images of Indian Societies</td>
</tr>
<tr>
<td>ANTH 1321</td>
<td>Impact on Colonialism: Gender and Nationalism in India</td>
</tr>
<tr>
<td>ANTH 1131</td>
<td>Indian Issues in Anthropological Perspective</td>
</tr>
<tr>
<td>ANTH 2321</td>
<td>Coming to Terms with India: Anthropology of Colonialism and Nationalism</td>
</tr>
<tr>
<td>POLS 1280</td>
<td>Politics, Economy and Society in India</td>
</tr>
<tr>
<td>At least one course in the visual arts, modern literature, music, cinema, or theatre of South Asia such as:</td>
<td>1</td>
</tr>
<tr>
<td>HIAA 1410A</td>
<td>Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent</td>
</tr>
<tr>
<td>HNDI 1080</td>
<td>Advanced Hindi-Urdu</td>
</tr>
<tr>
<td>MUSC 1933</td>
<td>Music of India</td>
</tr>
<tr>
<td>PRSN 1200</td>
<td>Iranian Cinema: Before and After the Islamic Revolution</td>
</tr>
<tr>
<td>RELS 0910</td>
<td>Music, Drama and Religion in India</td>
</tr>
<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circumpacific Performance</td>
</tr>
</tbody>
</table>

An Honors Thesis or a Capstone Course taken in an appropriate department. 1

Five electives 5

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Foundations that include basic statistical concepts and methodologies, the Bachelor of Science degree in Statistics 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. To ensure deep rigorous understanding of the foundations and main methods of analysis in statistics, the program is composed of three parts: a) foundations in mathematics and computing, combined with an introduction to statistical thinking and practice; b) four core courses on the fundamentals of statistical theory and data analysis; and c) more advanced material covering important areas of statistical methodology. A capstone project involving substantial data analysis or focused on methodology/theory is required. Students also have opportunities to acquire practical experience in study design, data management, and statistical analysis by working as undergraduate research assistants in projects of the participating academic departments or Research Centers at Brown.

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 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**
- 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**
- INTS 1301 Advanced Statistical Methods
- INTS 1320 Time Series Analysis
- INTS 1330 Multivariate Analysis
- INTS 1340 Experimental Design
- INTS 1350 Statistical Learning

**Statistics**

The Bachelor of Science degree in Statistics 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. To ensure deep rigorous understanding of the foundations and main methods of analysis in statistics, the program is composed of three parts: a) foundations in mathematics and computing, combined with an introduction to statistical thinking and practice; b) four core courses on the fundamentals of statistical theory and data analysis; and c) more advanced material covering important areas of statistical methodology. A capstone project involving substantial data analysis or focused on methodology/theory is required. Students also have opportunities to acquire practical experience in study design, data management, and statistical analysis by working as undergraduate research assistants in projects of the participating academic departments or Research Centers at Brown.

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 of the participating academic Departments or Research Centers at Brown.

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- MATH 0520 Linear Algebra

**Computing**
- APMA 0160 Introduction to Scientific Computing
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- PHP 1501 Essentials of Data Analysis

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**LEVEL II - Core Courses in Theory and Data Analysis**
- INTS 1301 Advanced Statistical Methods
- INTS 1320 Time Series Analysis
- INTS 1330 Multivariate Analysis
- INTS 1340 Experimental Design
- INTS 1350 Statistical Learning

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

- APMA 1740
- APMA 1710
- APMA 1690
- APMA 1200
- APMA 1080
- APMA 1070
- PHP 2620
- PHP 2604
- PHP 2601
- PHP 2580
- PHP 2550
- PHP 2530
- PHP 2520
- PHP 2515
- PHP 2511
- PHP 2510

**Electives in Social Science and Biostatistics**

- APMA 1740
- APMA 1710
- APMA 1690
- APMA 1200
- APMA 1080
- APMA 1070
- PHP 2620
- PHP 2604
- PHP 2601
- PHP 2580
- PHP 2550
- PHP 2530
- PHP 2520
- PHP 2515
- PHP 2511
- PHP 2510

**LEVEL III: Advanced Courses in Statistical Methods**

- PHP 1560
- PHP 2560
- PHP 2511
- PHP 2510

**Capstone Project**

- PHP 1970

**Electives in Social Science and Biostatistics (Students must choose 2)**

- SOC 1120
- SOC 1340
- SOC 2230
- CSCI 1420
- CSCI 1810
- CSCI 1820
- CSCI 1951A
- PHP 0850
- PHP 2030
- PHP 2120
- PHP 2200
- PHP 2515
- PHP 2520
- PHP 2530
- PHP 2550
- PHP 2580
- PHP 2602
- PHP 2601
- PHP 2604
- PHP 2610
- PHP 2620
- APMA 1070
- APMA 1080
- APMA 1200
- APMA 1690
- APMA 1710
- APMA 1740
- APMA 1860
- APMA 2610

**Other Analytical/Computational Statistical courses with the approval of the Director of the Statistics Concentration**

- APMA 1650
- ENGR 2520
- CLPS 1292
- CLPS 1492
- ECON 1360
- ECON 1630
- ECON 1640
- ECON 1660
- MATH 1810A

**Total Credits:** 13

Prospective students will be able to obtain Advanced Placement credit for the requirements in mathematics. Students who have already completed an introductory course in statistics will be granted permission to proceed to Level II core courses if they meet the prerequisites in mathematics and computing.

**Senior Thesis:** A senior honors thesis is not a requirement for graduation, but concentrators who choose to write one are required to write a manuscript that describes a major project of statistical data analysis that they performed or a simulation study to evaluate the performance of a statistical method. Students who decide to write an honors thesis will generally integrate their capstone project into their thesis. Generally, writing a senior thesis includes two semesters of independent study (PHP 1980), the capstone project may serve as one of those.

**Honors:** Statistics requires the completion of a senior thesis and a superior record in the program.

**Study Abroad/Study Away:** Up to two courses taken elsewhere (study abroad or other transfer) may be applied to required courses. Meet with a concentration advisor to discuss; provide a syllabus for each course to be considered for transfer to your concentration plan.

The program is administered by the Department of Biostatistics, located at 121 South Main Street, 7th floor.

For additional information please contact: Roee Gutman, Box G-S-121-7; Telephone: 401-863-2682; Fax: 401-863-9182; e-mail: Roee Gutman (rgutman@stat.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>
</tr>
<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:

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>TAPS 0220</td>
<td>Persuasive Communication</td>
</tr>
<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circumpacific Performance</td>
</tr>
<tr>
<td>TAPS 1270</td>
<td>Performing the Body: Staging Gender, Staging Race</td>
</tr>
<tr>
<td>TAPS 1280N</td>
<td>New Theories for a Baroque Stage</td>
</tr>
<tr>
<td>TAPS 1281O</td>
<td>Acting Outside the Box: Race, Class, Gender and Sexuality in Performance</td>
</tr>
<tr>
<td>TAPS 1380</td>
<td>Mise en Scene</td>
</tr>
<tr>
<td>TAPS 1390</td>
<td>Contemporary Mande Performance</td>
</tr>
<tr>
<td>TAPS 1430</td>
<td>Russian Theatre and Drama</td>
</tr>
<tr>
<td>TAPS 1610</td>
<td>Political Theatre of the Americas</td>
</tr>
<tr>
<td>TAPS 1630</td>
<td>Performativity and the Body: Staging Gender, Staging Race</td>
</tr>
<tr>
<td>TAPS 1650</td>
<td>21st Century American Drama</td>
</tr>
<tr>
<td>TAPS 1670</td>
<td>Latino/a Theatre and Performance</td>
</tr>
<tr>
<td>TAPS 1690</td>
<td>Performance, Art, and Everyday Life</td>
</tr>
<tr>
<td>TAPS 2120</td>
<td>Revolution as a Work of Art</td>
</tr>
<tr>
<td>AFRI 0990</td>
<td>Black Lavender: Black Gay/Lesbian Plays/ Dramatic Constructions in the American Theatre</td>
</tr>
</tbody>
</table>

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

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**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:

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<td>Twentieth-Century Western Theatre and Performance</td>
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</table>

Select three of the following (one of which must show geographical breadth) in consultation with the advisor.

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Total Credits: 10
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 cause nor a terminal outpost, but as a co-equal aspect of a creative 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**

- **TAPS 0100** Playwriting I (or other equivalent introductory level Playwriting course, to be approved by the advisor) 1 credit

Select one of the following: 1 credit

- AFRI 1050A Advanced RPM Playwriting
- AFRI 1050D Intermediate RPM Playwriting
- AFRI 1050E RPM Playwriting
- LITR 0610A Unpublishable Writing
- LITR 1150Q Reading, Writing and Thinking for the Stage
- LITR 1010C Advanced Playwriting
- LITR 1150S What Moves at the Margins
- TAPS 0200 Playwriting II

A course from the TAPS 1500 series (A-Z) 1 credit

A writing or composition class in a discipline outside of playwriting (e.g., literature, screenwriting, digital media), to be approved by advisor. For example:

- TAPS 1210 Solo Performance
- TAPS 1280S Libretto Workshop for Musical Theatre
- TAPS 1500I Screenwriting
- TAPS 1500J Script Adaptation
- ENV 0520 Wild Literature in the Urban Landscape
- LITR 0110A Fiction I
- LITR 0110B Poetry I
- LITR 0210A Fiction Writing II
- LITR 0210B Poetry Writing II
- LITR 1150E Strange Attractors: Adaptations/Translations
- LITR 1150M Short Fiction Experiments
- TAPS 1500L Acting Together on the World Stage: Writing and Political Performance

TAPS 0250 Introduction to Technical Theatre and Production 1 credit

Two of the following three courses: 2 credits

- TAPS 1230 Global Theatre and Performance: Paleolithic to the Threshold of Modernity
- TAPS 1240 Performance Historiography and Theatre History
- TAPS 1250 Twentieth-Century Western Theatre and Performance

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:

- TAPS 1230 Global Theatre and Performance: Paleolithic to the Threshold of Modernity
- TAPS 1240 Performance Historiography and Theatre History
- TAPS 1250 Twentieth-Century Western Theatre and Performance

Total Credits 10

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 990), 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:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 1903E</td>
<td>City of the American Century: The Culture and Politics of Urbanism in Postwar New York City</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
<tr>
<td>APMA 1660</td>
<td>Statistical Inference II</td>
</tr>
<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
</tr>
<tr>
<td>EDUC 1110</td>
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<tr>
<td>HP 1501</td>
<td>Essentials of Data Analysis</td>
</tr>
<tr>
<td>POLS 1600</td>
<td>Political Research Methods</td>
</tr>
<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>

### Seminar Courses (choose three)

<table>
<thead>
<tr>
<th>Course Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HIAA 0074</td>
<td>Nineteenth-Century Architecture</td>
</tr>
<tr>
<td>HIAA 0770</td>
<td>Architecture and Urbanism of the African Diaspora</td>
</tr>
<tr>
<td>HIAA 0840</td>
<td>History of Rhode Island Architecture</td>
</tr>
<tr>
<td>HIAA 0850</td>
<td>Modern Architecture</td>
</tr>
<tr>
<td>HIAA 0860</td>
<td>Contemporary Architecture</td>
</tr>
<tr>
<td>HIAA 0861</td>
<td>City and Cinema</td>
</tr>
<tr>
<td>HIAA 1103</td>
<td>Introduction to Architectural Design</td>
</tr>
<tr>
<td>HIAA 1850D</td>
<td>Film Architecture</td>
</tr>
<tr>
<td>HIST 1550</td>
<td>American Urban History, 1600-1870</td>
</tr>
<tr>
<td>HIST 1551</td>
<td>American Urban History, 1870-1965 (HIST 1550::American Urban History to 1870)</td>
</tr>
<tr>
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<td>SOC 1340</td>
<td>Principles and Methods of Geographic Information Systems</td>
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<tr>
<td>SOC 1640</td>
<td>Social Exclusion</td>
</tr>
<tr>
<td>URBN 1000</td>
<td>Fieldwork in the Urban Community</td>
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<td>The United States Metropolis, 1945-2000</td>
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</tr>
<tr>
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<td>Crime and the City</td>
</tr>
</tbody>
</table>

### 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)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 1612D</td>
<td>Cities of Sound: Place and History in American Pop Music</td>
</tr>
<tr>
<td>ANTH 1236</td>
<td>Urban Life: Anthropology in and of the City</td>
</tr>
<tr>
<td>ANTH 1255</td>
<td>Anthropology of Disasters</td>
</tr>
<tr>
<td>ECON 1410</td>
<td>Urban Economics</td>
</tr>
<tr>
<td>ENGL 0100N</td>
<td>City Novels</td>
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<tr>
<td>ENGL 1760K</td>
<td>Reading New York</td>
</tr>
<tr>
<td>ENVS 1400</td>
<td>Sustainable Design in the Built Environment</td>
</tr>
<tr>
<td>ENVS 1580</td>
<td>Environmental Stewardship and Resilience in Urban Systems</td>
</tr>
<tr>
<td>GEOL 1320</td>
<td>Introduction to Geographic Information Systems for Environmental Applications</td>
</tr>
<tr>
<td>HIAA 0074</td>
<td>Nineteenth-Century Architecture</td>
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<tr>
<td>HIAA 0770</td>
<td>Architecture and Urbanism of the African Diaspora</td>
</tr>
<tr>
<td>HIAA 0840</td>
<td>History of Rhode Island Architecture</td>
</tr>
<tr>
<td>HIAA 0850</td>
<td>Modern Architecture</td>
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<tr>
<td>HIAA 0860</td>
<td>Contemporary Architecture</td>
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<tr>
<td>HIAA 0861</td>
<td>City and Cinema</td>
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<tr>
<td>HIAA 1103</td>
<td>Introduction to Architectural Design</td>
</tr>
<tr>
<td>HIAA 1850D</td>
<td>Film Architecture</td>
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</table>

### Research Methods (choose one):

<table>
<thead>
<tr>
<th>Course Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
<tr>
<td>APMA 1660</td>
<td>Statistical Inference II</td>
</tr>
<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
</tr>
<tr>
<td>EDUC 1110</td>
<td>Introductory Statistics for Education Research and Policy Analysis</td>
</tr>
<tr>
<td>HP 1501</td>
<td>Essentials of Data Analysis</td>
</tr>
<tr>
<td>POLS 1600</td>
<td>Political Research Methods</td>
</tr>
<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).
### Complementary Curriculum (Total of 2 courses required): 2

1. Any course from the Introductory or Core Curriculum options above not used to fulfill another requirement
2. OR Any of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1760F</td>
<td>City, Culture, and Literature in the Early Twentieth Century</td>
</tr>
<tr>
<td>HIAA 1850H</td>
<td>Berlin: Architecture, Politics and Memory</td>
</tr>
<tr>
<td>HIAA 1910A</td>
<td>Providence Architecture</td>
</tr>
<tr>
<td>PLCY 1700J</td>
<td>GIS and Public Policy</td>
</tr>
<tr>
<td>SOC 1871W</td>
<td>Geographical Analysis of Society</td>
</tr>
<tr>
<td>SOC 2960C</td>
<td>Urban Sociology</td>
</tr>
<tr>
<td>URBN 1010</td>
<td>Fieldwork in Urban Archaeology and Historical Preservation</td>
</tr>
<tr>
<td>URBN 1870A</td>
<td>American Culture and the City</td>
</tr>
<tr>
<td>URBN 1870C</td>
<td>The Environment Built: Urban Environmental History and Urban Environmentalism for the 21st Century</td>
</tr>
<tr>
<td>URBN 1870D</td>
<td>Downtown Development</td>
</tr>
<tr>
<td>URBN 1870H</td>
<td>Rivers and Cities</td>
</tr>
<tr>
<td>URBN 1870I</td>
<td>The Changing American City</td>
</tr>
<tr>
<td>URBN 1870J</td>
<td>The Politics of Community Organizing</td>
</tr>
<tr>
<td>URBN 1870M</td>
<td>Urban Regimes in the American Republic</td>
</tr>
<tr>
<td>URBN 1870N</td>
<td>The Cultural and Social Life of the Built Environment</td>
</tr>
<tr>
<td>URBN 1870P</td>
<td>Representing the Twentieth-Century City</td>
</tr>
<tr>
<td>URBN 1870Q</td>
<td>Cities in Mind: Modern Urban Thought and Theory</td>
</tr>
<tr>
<td>URBN 1870R</td>
<td>Bottom-up Urbanism</td>
</tr>
<tr>
<td>URBN 1870S</td>
<td>The City, the River, and the Sea: Social and Environmental Change at the Water's Edge</td>
</tr>
<tr>
<td>URBN 1870T</td>
<td>Transportation: An Urban Planning Perspective</td>
</tr>
<tr>
<td>URBN 1870U</td>
<td>Critical Urban Theory</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
SOC 0130  American Heritage: Democracy, Inequality, and Public Policy
SOC 1270  Race, Class, and Ethnicity in the Modern World
SOC 1540  Human Needs and Social Services

3. RISD courses approved by the Urban Studies Program each semester as applicable to the Urban Studies concentration.  

4. Any course taken at another university in the US or abroad and approved by the Urban Studies Program each semester (2 maximum)

Total Credits 10

1. There are also other statistics courses offered by other departments (e.g., Applied Mathematics, Cognitive Sciences, and Psychology). On occasion, an alternative research skills course may be approved for a specific concentration.

2. The courses provide opportunities to undertake research or fieldwork projects and all qualify as "capstone" experiences.

3. No more than two may be used to satisfy the requirements of this concentration. The RISD course is identified in the student’s record at Brown by a RISD course code.

Off-Campus Courses: Some courses taken outside Brown (e.g., in study abroad programs) may be used for credit toward 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/NC (https://www.brown.edu/academics/college/degree/policies/grade-options).

Concentration Program Requirements

Concentration Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISA 0100</td>
<td>Studio Foundation (Prerequisite for all upper-level studio courses)</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0120</td>
<td>Foundation Media: Sound and Image</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0130</td>
<td>3-D Foundation</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0140</td>
<td>Photography Foundation</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0150</td>
<td>Digital 2D Foundation</td>
<td>1</td>
</tr>
</tbody>
</table>

5 additional studio courses are required. A minimum of three elective studio courses must be taken in the Brown Visual Art Department

3 HIAA courses are required:

<table>
<thead>
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<th>Credit</th>
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<tbody>
<tr>
<td>HIAA 0010</td>
<td>A Global History of Art and Architecture</td>
<td>1</td>
</tr>
<tr>
<td>HIAA 0801</td>
<td>Art After ‘68</td>
<td>1</td>
</tr>
<tr>
<td>or HIAA 0810</td>
<td>20th Century Sculpture</td>
<td>1</td>
</tr>
<tr>
<td>or HIAA 0870</td>
<td>20th Century British Art: Edwardian to Contemporary</td>
<td>1</td>
</tr>
</tbody>
</table>

One additional History of Art and Architecture course.

Senior Thesis Exhibition: which does not carry academic credit, is required for graduation (usually presented during the seventh or eighth semester).

Total Credits 11

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.