University Calendar and Registration-Related Deadlines 2011–2012

2011 Summer Session

June 19 Sunday. Residence halls open.
June 20 Monday. Summer Session begins.
June 22 Wednesday. Last day to change courses. (All students MUST be in their registered courses by Thursday, June 23.)

July 4 Monday. Independence Day holiday; no classes.
July 5 Tuesday. Last day to change grade options.
July 30 - Aug. 2 Saturday through Tuesday. Reading period.
August 2 Tuesday. Last day to drop a course.
August 3 - 5 Wednesday through Friday. Final examination period.
August 5 Friday. Summer Session ends.
August 6 Saturday. Residence halls close.

Semester I, 2011-12

August 1 Monday. Last day for payment of charges.
September 5 Monday. Labor Day holiday. No University exercises.
September 6 Tuesday. New students register for first semester classes.
September 7 Wednesday. First day of classes for the fall term. Opening Convocation: 4:00 pm.
September 20 Tuesday. Last day to add a course without a fee, or to add on-line. (5 pm deadline)
October 4 Tuesday. Last day to add a course with a fee, change from audit to credit, or change a grade option declaration. (5 pm deadline)
October 10 Monday. Fall Weekend holiday. No University exercises.
October 14 Friday. Mid-semester deadline. Last day to change from credit to audit in a course. (5 pm deadline) Last day to request a Course Performance Report.
October 15 Saturday. Deadline to confirm readmission for Semester II.
October 17 – October 28 Monday through Friday. Advising period for spring pre-registration. Students in their first through third semesters will need to procure their advising PIN from their advisor in order to register.
October 27 Thursday. Date by which sophomores entering their 5th semester must file their concentration declaration forms with the Registrar to avoid having a “No Concentration” hold placed against their Banner registration. (Forms due by 5 pm)
November 1 - 8 Tuesday through Tuesday. Registration for Semester II. (Note: No student will be permitted to register for his or her fifth semester unless a declaration of concentration has been filed.)
November 4 Friday. Deadline for submitting of proposals for undergraduate group study projects (GISP) for Semester II.
November 8 Tuesday. End of the pre-registration period. Last day for students in their 7th semester to declare a second concentration. (5 pm deadline)

Semester II, 2011-12

January 1 Sunday. Last day for payment of charges.
January 16 Monday. Martin Luther King, Jr. holiday. No University exercises.
January 24 Tuesday. New students register for the second semester.
January 25 Wednesday. First day of classes for second semester. Theses of candidates for Masters and Ph.D. degrees in May (on Semester I registration fee) due.
February 7 Tuesday. Last day to add a course without a fee, or to add on-line. (5 pm deadline)
February 22 Wednesday. Classes resume. Last day to add a course with a fee, change from audit to credit, or change a grade option declaration. (5 pm deadline)
March 9 Friday. Mid-semester deadline. Last day to change from credit to audit in a course. (5 pm deadline) Last day to request a Course Performance Report.
March 19-24 April 1 Saturday through Sunday. Spring recess.
April 1 Sunday. Deadline for students on leave to confirm readmission for Semester I.
April 2 Monday. Classes resume.
April 2-13 Monday through Friday. Advising period for fall pre-registration. Students in their first through third semesters will need to procure their advising PIN from their advisor in order to register.
April 6 Friday. Deadline for submitting of proposals for undergraduate group study projects (GISP) for Semester I.
April 12 Thursday. Date by which sophomores entering their 5th semester must file their concentration declaration forms with the Registrar to avoid having a “No Concentration” hold placed against their Banner registration. (Forms due by 5 pm)
April 17-24 Tuesday through Tuesday. Registration for Semester I, 2012-13. (Note: No student will be permitted to register for his or her fifth semester unless a declaration of concentration has been filed.)
April 24 Tuesday. End of the pre-registration period. Last day for students in their 7th semester to declare a second concentration. (5 pm deadline)
April 27 - May 8 Friday through Tuesday. Reading Period (optional and at the discretion of the instructor).

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu) or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public.P_Main).
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For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Academic Regulations

For the full text on the Academic Regulations and Instructions for Registration, see the Registrar's Office web site at: http://www.brown.edu/Administration/Registrar/guidelines/index.html

For a tutorial on registration, see: http://www.brown.edu/CIS/Training/onlinetraining/index.php

To access the Catalog or Schedule in Banner, see: http://selfservice.brown.edu/menu

To access the Brown Course Search tool, see: https://selfservice.brown.edu/ss/hwwkcourse_search_public.P_Main

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.

Maximum Course Load and Audits - A degree candidate who is paying full tuition and is enrolled for credit in fewer than five courses may be permitted to audit additional courses in any semester without charge. The total number of course registrations plus audits may not exceed five credits per semester, or two credits in the summer.

Repeated Courses: Unless specifically mentioned as an exception in this announcement, any course already completed for credit (either at Brown or through transfer credit) may not be repeated.

Final Examination Schedule - 2011-2012

A period at the close of each semester (eight days for Semester I and nine days for Semester II) is provided for final examinations for those courses for which such an examination is scheduled. Two examination periods are held each day. The examination group for each course is indicated by the figure in parentheses following the meeting time for each course.

The schedule for final examinations for the academic year 2011-2012 is as follows:

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EXAM EXCUSES: The Dean of the College Office 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 Dean Stephen Lassonde or Dean Kathleen McSharry, who 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.

Course Registration in Banner:

Glossary of terms:

CATALOG: the record of all courses that are approved to be taught at Brown. Course descriptions appear at the Catalog level.

SCHEDULE: the record of course offerings (sections, labs, conferences, etc.) being offered in any given semester and the level at which students register. The course description is accessible from the Schedule record.

CRN: Course Reference Number, a unique number for each section which can be used to register for the course.

COURSE DEPARTMENT: Department sponsoring a particular course.

COURSE NUMBERS: Courses that are primarily for undergraduates are numbered under 1000; courses for Undergraduate and Graduates are numbered 1000 to 1999; courses primarily for Graduate students are numbered 2000 – 2999; and courses for Medical students are numbered 3000 and above.

LIMITED ENROLLMENT COURSES: The following principles recommended by the College Curriculum Council, govern registration in limited enrollment courses numbered 1-1999.

In order to ensure quality teaching and create an environment conducive to learning, many courses have enrollment limits and/or other registration parameters (e.g. concentrators only; freshmen only). Students attempting to enroll in a limited course will be allowed to register online only if they meet all of the parameters and space is available in the course. Once classes have begun, priority will be given to students who have pre-registered for the course, who meet the posted admission criteria, and who attend the first class meeting. Students who have permission for a limited enrollment course must attend the first three class meetings (or the first two meetings of once-weekly seminars); otherwise, they forfeit any claim to a place in that course. Students who decide against taking the course are asked to drop it immediately to open a space for others who wish to add the course.

If the enrollment limit in a course has been reached and the course is therefore closed to registration, the instructor may grant a registration override which will allow the student to register.

REGISTRATION RESTRICTION OVERRIDE: Students whose registration is blocked by a registration restriction (enrollment limit; class restriction; pre-requisite requirement, etc.) must obtain a registration override. There are two ways of obtaining the override. First, the instructor may provide the student with a pre-printed Registration Override Code which the student will then enter into the Add Registration Override Code area of Banner. Once the Code is correctly entered, the student will be able to add the course by clicking the Add to Worksheet button and submitting changes. Alternately, the instructor can enter the student’s Banner ID into a special online form. Once the override is entered, the student will be able to add the course. It is important to note that the instructor’s entering of the override only allows for the student to register online; it does not in itself register the student for the course. The student must still add the course themselves once the override has been entered.

NOTE: Starting the third week of classes, the student must add the course using a drop/add form submitted to the Office of the Registrar. The instructor’s online entering of the override or signature on the add form is still required during that period.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcourse_search_public.P_Main).
CROSS-LISTED COURSES: Many departments cross-list courses taught outside the department that may be of interest to concentrators in the department. Cross-listed courses may be found in the Course Announcement and in the Banner Schedule either in the body of the department's course listing or at the end of the department's section under the course number "XLIST".

NOTE: Cross-listed courses included in the body of the department's course listing (known as "secondary cross-listings") are not open for registration and are intended only to refer to the primary cross-listing in the other department. Interested students should and can register only for the primary listing.

FRESHMEN and SOPHOMORES – ADVISING PIN REQUIRED: Students in their first through fourth semester, including incoming first-year students, need an advising PIN (personal identification number) in order to register. Your advisor will give this to you after you meet to discuss your academic plans. Be sure to keep track of this PIN since you will need it to make any changes to your registration.

YEAR COURSE: 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.

EXAM GROUP: The number in parentheses that follows the meeting time designates the examination group assigned to the section. The date and time for each numbered exam group can be found in the table above (FINAL EXAMINATION SCHEDULE). Every course has an assigned examination time although not every course has an exam at that time.

S/NC -- This notation will appear as part of the course description for those courses which have been restricted by the instructor to the grade option of Satisfactory/No Credit. For all other courses, the student has the choice of option: A,B,C/NC or S/NC.

ARR. -- Arranged. This can be for either the recitation group or the final examination group. The intent is that a time is set which is mutually agreeable to the instructor and the students.

MEETING CODE -- The course code consisting of up to twelve characters, including a section number, is listed for each course following the course description. It is to be used by students in registering for or changing course enrollments.

M01 -- Common meeting.

S01, S02, etc. -- Section. In general this involves grading units for the course and may include a division of the course enrollment into smaller numbers to facilitate opportunities for discussion. When registering for a course, a student must indicate a section number as part of the meeting code. All courses have at least one section.

C01, C02, etc. -- Conference. Generally an auxiliary meeting such as a discussion group or problem-solving session. Attendance at conferences may be required.

L01, L02, etc. -- Laboratory.

F01, F02 -- Filming or screening.

NOTE: Students should register for ALL meeting types of a course. In most cases, the course description will indicate that there are other meeting types for which the student should register in addition to the section. Details about the other meetings, their times, etc. can be found in the Banner Schedule.

DECLARATION OF CONCENTRATION: By faculty rule, students in their fourth semester must have declared a concentration before they can register for their fifth. Students in their fourth semester or above who have not declared a concentration will have a hold placed on their Banner registration. They will not be allowed to register until a concentration declaration has been filed and recorded by the Office of the Registrar, and the hold has been removed. Failure to file a concentration until after a pre-registration deadline will not exempt a student from being charged the late pre-registration fee. Students transferring to Brown at the beginning of their junior year will have until the November pre-registration period to file a concentration.

The list of undergraduate concentrations with full descriptions can be found at the back of this Course Announcement and on-line (http://www.brown.edu/Administration/focal-point/).

Changes to registration:

THE SEMESTER "WEEK": Classes for each semester begin on a Wednesday. Therefore, with regard to registration deadlines expressed in terms of weeks in the semester, the week is considered as beginning on a Wednesday and ending on a Tuesday. (Exception is the Wednesday following the long University weekend in February.)

ADDING A COURSE: Courses may be added online during the two pre-registration periods and during the first two weeks of each semester. Starting the third week of each semester, courses can only be added using a drop/add form that must be signed by the instructor and submitted by the student to the Office of the Registrar. Courses may not be added after the fourth week.

REGISTRATION FEES:

Late Pre-Registration Fee: Students who fail to pre-register by the conclusion of the pre-registration period will have a registration hold placed on their record. When registration opens again at the start of the semester, the student will have to contact the Office of the Registrar to have the hold lifted. A $15 late pre-registration fee will be charged to the student account at that time.

Late Add Fee: A course change fee of $15 will be charged to the student account for each course added after the second week of the semester unless the lateness of the add is attributable directly to University action.

DROPPING A COURSE: A course may be dropped online during the pre-registration period and at any time during the semester until the last day of classes. There is no fee for dropping a course. Courses dropped after the second week of the semester are retained as a ‘Recorded Drop’ on the student’s Internal Academic Record.

CHANGE OF GRADE OPTION: Students may change a grade option online at any time during the pre-registration periods and from the first day of classes to the end of the fourth week of the semester. Changes in grade options are not permitted after the fourth week of the semester. Students adding courses, with the permission of the Committee on Academic Standing, after the fourth week do not have a choice of grade option. They must take the course on an ABC/NC basis unless the grading is mandatory S/NC or unless they were previously registered for the course with an S/NC grade option.

COURSE REGISTRATION AND ENROLLMENT REGULATIONS:

Enrollment regulations currently in effect provide that payment of the annual tuition entitles degree candidates to full-time enrollment, which is defined as registration for 3, 4 or 5 courses per semester. This means that at no time may a student’s official registration for courses drop below three without a dean’s permission for part-time status and that at no time may the official course registration (including audits) exceed five. The minimum enrollment requirement is eight semesters or the equivalent for the baccalaureate degree. The minimum enrollment requirement for the program leading to the combined degrees of AB–ScB is ten semesters of enrollment credit. For the complete text on the enrollment requirement, see the Registrar’s Office web site.

ADDITIONAL SEMESTERS: Except for students enrolled in the five year combined AB–ScB program, undergraduates must obtain special permission from the appropriate academic dean for a ninth semester. For a tenth semester the student must petition the Committee on
6 / Undergraduate Degrees:
Academic Standing.

SUMMER COURSES: The University sponsors a formal program of summer study for Brown students. Among the many advantages offered by summer courses at Brown are: the luxury of small classes with some of Brown's best faculty and expert visiting faculty; a curriculum that includes innovative courses presently available only in the Summer Session; the opportunity to devote concentrated attention to one subject; and the availability of small sections of courses that are typically over-enrolled during the academic year.

In addition, Brown undergraduates can find summer courses helpful either to maintain progress towards their degree or to accelerate their degrees (i.e. graduate in seven semesters) by earning four summer credits at Brown, thus saving approximately half of one semester's tuition charges. (Note that summer courses taken elsewhere cannot be used to accelerate.)

Summer courses are equivalent to courses offered at Brown during the fall and spring semesters. They are intensive, meeting a minimum of seven hours per week. Courses carry full credit for undergraduates enrolled at Brown, and as many as four of these courses may count toward the baccalaureate degree. Any combination of summer courses (Brown or through transferred work) may not exceed 4 courses/credits. Students are advised to read carefully the Guidelines and Regulations Concerning Summer Study to understand a number of special policies that apply to the Summer Session. The Guidelines and Summer Session catalog is available online at http://www.brown.edu/ce/undergrad/summer/.

The Continuing Education staff is available for information and advice; students are urged to consult the staff with any questions concerning summer courses or policies.

General Academic Requirements:

Undergraduate Degrees:

1. **Quantity**: the minimum number of course credits that must be successfully completed for an AB or ScB is 30; for the combined AB-ScB the minimum is 38; for the concurrent Bachelor's/Master's programs the minimum is 34.

2. **Writing Requirement**: Learning to write well is a developmental process that occurs over time. Brown students are therefore expected to work on their writing across the four years, in their general studies and the concentration. Students may begin to fulfill this expectation by taking at least one WRIT-designated course. WRIT courses engage students in the writing process: they require students to draft and revise papers based on feedback about their prose.

   Every piece of written work that students submit to their course instructors at Brown should meet baseline standards for effective written communication. Students whose work does not meet these standards are referred to an associate dean of the College, who will assess the student's writing abilities and help the student work out a program to fulfill the requirement. This might entail taking an English course or completing work at the Writing Center. Some students may be urged to complete a writing course when they first study at Brown. Such cases are determined on the basis of written work students submit for admission to Brown or during the summer prior to their arrival at Brown.

3. **Concentration**: All students must complete at least one concentration in order to graduate from Brown. Standard concentration requirements may be found at the back of this Course Announcement and at http://www.brown.edu/Administration/local-point/. Students also have the option to create a concentration program of their own design, with the approval of the College Curriculum Council. Students may register for a maximum of three concentrations; Brown does not offer minors. Students are required to declare a concentration by the middle of their fourth semester of study.

4. **Residence Requirement**: Every candidate for a baccalaureate degree must be enrolled on campus for at least four semesters as a full-time student and must complete satisfactorily a minimum of fifteen courses at Brown, excluding courses taken on Brown approved programs abroad.

5. **Enrollment Requirement**: The minimum enrollment requirement is eight semesters or the equivalent for the baccalaureate degree. The minimum enrollment requirement for the program leading to the combined degrees of AB–ScB is ten semesters of enrollment (full tuition) credit.

For descriptions of advanced degree requirements, see the Registrar’s Office web site at: http://www.brown.edu/Administration/Registrar/guidelines/index.html and the Graduate School web site at: http://www.brown.edu/gradschool/.

Curricular Programs

**Diversity Perspectives**: Diversity Perspectives courses focus primarily or at least substantially on the knowledge and experience of groups that are underrepresented in traditional approaches to knowledge and learning. These courses examine the ways in which disciplines, histories, and paradigms of knowledge are reconfigured by the study of diversity-related intellectual questions.

Diversity Perspectives courses are designated “DVPS” at the end of course descriptions. They may be viewed in the Banner Class Schedule by choosing “Diversity Perspectives” in the Attribute Types section.

**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.

First-year seminars are designated “FYS” at the end of course descriptions. A complete list of each semester’s seminars may be viewed in Banner's Class Schedule by choosing “First-Year Seminars” in the Attribute Type section. 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.

**Liberal Learning Courses**: Liberal Learning course list was created to assist students in planning a course of study consistent with the goals of a liberal education. These courses, which are an established part of the Brown curriculum, emphasize synthesis rather than survey and focus on methods, concepts, and values. Reflecting Brown’s conviction that liberal education requires active student involvement, Liberal Learning courses entail extensive student participation through papers, projects, reports, and class discussion.

Liberal Learning Courses are designated with “LILE” at the end of course descriptions. A complete list of each semester’s LILE courses may be viewed in Banner’s Class Schedule by choosing “Liberal Learning” in the Attribute Type section.

**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 Banner’s Class Schedule by choosing “Writing-Designated Courses” in the Attribute Types section.

**Diversity Perspectives**

- Fall
- Africana Studies

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public.P_Main).
AFRI0880 S01 16650 Hip Hop Music and Cultures Patricia Rose
AFRI1150 S01 16652 Afro-Caribbean Philosophy Paget Henry
American Civilization
AMCV1611A S01 14860 20thC US Immigrant Ethnic Lit Richard Alan Meckel
American Sign Language
SIGN1910 S01 14272 Independent Study Arkady Belozovsky
Anthropology
ANTH0066D S01 17087 Who Owns the Past? Patricia Rubertone
ANTH0200 S01 17092 Culture and Human Behavior Marida Hollos
ANTH0300 S01 14352 Culture and Health
ANTH1124 S01 17093 United States Health
ANTH1151 S01 16977 Ethnographies Muslim Mid East Becky Schulties
Classics
CLASS070 S01 16850 Ancnt Utopias/Imaginary Places Jeri Debrohun
CLASS160 S01 17169 Classics of Indian Literature James Fitzgerald
Comparative Literature
COLT0710A S01 16630 Women's Words Meera Sushila Viswanathan
COLT1810H S01 16626 Tales Two Cities:San Juan-NYC Esther Whitfield
Hatian Creole
CRO0300 S01 13781 Advanced Intermediate Creole Patrick Sylvain
Education
EDUC040D S01 16792 Brown v. Board of Education Tracy Steffes
English
ENGL0610D S01 16775 Lit and Culture of Black Power Rolland Murray
ENGL1900 S01 16779 Aesthetics and Sexuality Jacques Khalip
Hispanic Studies
HISP0730 S01 15369 Early/Contmp Wrtr of Span Amer
Portuguese and Brazilian Studies
POBS1500W S01 17020 The 'New Jew' and the Diaspora Nelson Vieira
Russian
RUSS0320C S01 17131 Demons and Angels Michal Oklot
RUSS1840 S01 17133 Nabokov Michal Oklot
Spring
American Civilization
AMCV1010 S01 26015 Intro to American Studies Elliott Gorn
American Sign Language
SIGN1910 S01 24184 Independent Study Arkady Belozovsky
Anthropology
ANTH0066I S01 26653 You Want to Change the World Bianca Dahl
ANTH0066J S01 23656 Intro to Linguistic Anthro Becky Schulties
ANTH1211 S01 26836 Cross Cult Perpsective Children Marida Hollos
ANTH1240 S01 25566 Religion and Culture William Simmons
ANTH1411 S01 26837 Nations within States Douglas Anderson
ANTH1623 S01 26835 Archaeology of Death Patricia Rubertone
Classics
CLASS110 S01 26930 Classical Philosophy of India James Fitzgerald
Economics
ECON040 S01 10923 Amer College/Universty-1960's Luther Spoehr
Feminist Studies
FEM0100 S01 16792 Brown v. Board of Education Tracy Steffes
English
ENGL0610E S01 16777 Life and Culture of Black Power Rolland Murray
ENGL1900 S01 16779 Aesthetics and Sexuality Jacques Khalip
Ethics
ETH1010 S01 16792 Brown v. Board of Education Tracy Steffes
Family
FAM0100 S01 15369 Early/Contmp Wrtr of Span Amer
First Year Seminars
Fall
Africana Studies
AFRI1100C S01 16649 Autobiography Civil Rights Mvmt Francoise Hamlin
Anthropology
ANTH0066D S01 17087 Who Owns the Past? Patricia Rubertone
ARCH0270 S01 14734 Troy: Archaeology of an Epic
Archaeology and the Ancient World
ARCH0270 S01 14734 Troy: Archaeology of an Epic
Biology and Medicine
BIOI0190E S01 15857 Darwinian Medicine Marc Tata
BIOI0190F S01 17192 Phage Hunters, Part I Peter Shank
Chemistry
CHEM0080B S01 13735 Molecular Structrs in Chem/Bio Paul Gregory Willard
Comparative Literature
COLT0510C S01 16620 The World of Lyric Poetry Dore Levy
COLT0610D S01 14563 Rites of Passage Arnold Louis Weinstein
Economics
ECON0180 S01 16863 Punishment + Inequality in US Glenn Louy
Environmental Studies
ENVS0070C S01 16352 Transcending Transpnt Impacts Kurt Teichert
Geological Sciences
GEOI0160C S01 16731 Global Environmental Change Joan Rodman
German Studies
GERM0110C S01 16619 Tales of Vampirism/The Uncanny Thomas Kniesche
Hispanic Studies
HISP0750D S01 15370 Mexico, Image and Encounter Beth Bauer
History
HIST0970J S01 16930 The Measure of All Things Omer Bartov
Judaic Studies
JUDS1410 S01 26777 The Talmud Michael Salow
Literary Arts
LITR1230J S01 20820 Writing: Material Differences John Cayley
Persian
PRSN1200 S01 26723 Iranian Cinema Iraq Anvar
Religious Studies
RELS0140 S01 23483 Religion in India
RELS0910J S01 25800 Women, Sex and Gender in Islam Nancy Khalek
Science and Society
SCSI0550E S01 25764 Science and Religion Jeffrey Poland
Slavic Languages
SLAV01790 S01 26895 Eastern European Literature Michal Oklot
Urban Studies
URBN1420 S01 20671 Urbanization in China J. Vernon Henderson

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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HIST0971E S01 17074 The U.S. and the Middle East
Judaic Studies
JUDS0050A S01 14060 Believers, Agnostics, Atheists David Jacobson
JUDS0050D S01 16742 Astrology, Magic, and Science Maud Kozodoy

Literary Arts
LITR0310B S01 16654 Into the Machine Joanna Howard
LITR0710 S01 13103 Writers on Writing Seminar Annette Gladman
LITR0610C S01 26775 Books By Hand Annette Gladman

Modern Culture and Media
MCM0100 S01 15499 Freedom
MCM0100 G S01 15499 Freedom

Music
MUSC0021F S01 17161 Popular Music in Latin America
MUSC0021G S01 17052 Duke Ellington Matthew McGarrell

Philosophy
PHIL0990X S01 17206 Conditionals James Dreier
PHIL0090X S01 17206 Conditionals James Dreier

Physics
PHYS0110 S01 16330 Extra Dimensions
PHYS0111 S01 16330 Extra Dimensions

Portuguese and Brazilian Studies
POBS0810 S01 10558 Cross-Cultural Identities Patricia Sobra
POBS0910 S01 16712 On the Dawn of Modernity Onesimo Almeida

Political Science
POLS0820D S01 15499 Freedom

Religious Studies
REL0090F S01 16664 Friendship in the Anc't World Saul Olyan
REL0090E S01 16640 Comparative Polities Roger Cobb
REL0090F S01 14302 Politics of Amer Fed Holidays Roger Cobb

Public Policy and American Institutions
PUBL0700I S01 15803 Comparative Polities Rebecca Weitz-Shapiro

Russian
RUSS0320C S01 17131 Demons and Angels Michal Oklot
RUSS0320D S01 17074 The Tolstoy Event: War & Peace Svetlana Evdokimova

Spring

Anthropology
ANTH0066J S01 26653 You Want to Change the World Bianca Dahl

Ancient Western Asian Studies
AWAS0300 S01 26391 Babylon: Myth and Reality John Steele

Biology and Medicine
BIOLO1900 S01 26703 Conservation Medicine Katherine Smith
BIOLO1905 S01 26960 Phase Hunters, Part II Peter Shank

Community Health
PHP0030 S01 21746 Health of Hispaniola Timothy Empkie

Comparative Literature
COLT0510F S01 26372 Che Guevara, The Man + Myths Esther Whitfield

Education
EDUC0410E S01 23505 Empowering Youth Deborah Rivas

English
ENGL1561H S01 16771 The Brain and the Book Vanessa Ryan
ENGL0400A S01 11418 Introduction to Shakespeare Jean Feerick
ENGL0450E S01 15846 Inventing America James Egan

Geological Sciences
GEOG0380 S01 13636 Eco + Evo Infectious Disease Daniel Weinreich

Gender and Sexuality Studies
GNSS0909C S01 23491 Reproductive Health Sarah Fox

Italian Studies
ITAL0751 S01 26870 Machiavelli in Int'l Context Caroline Castiglione

Literary Arts
LITR0110B S01 24040 Poetry Leon Cooper
LITR0610C S01 26775 Books By Hand Annette Gladman

Music
MUSC0021E S01 26548 The Music of Everyday Objects Joseph Ro man
MUSC0021F S01 17161 Popular Music in Latin America

Physics
PHYS0100 S01 21799 Nature/Meaning Sci Explanation Leon Cooper
PHYS0111 S01 16330 Extra Dimensions

Political Science
POLSC0820G S01 25220 Race and Political Representations Katrina Gamble

Religious Studies
REL0090E S01 26403 Faith and Violence Michael Satlow

Russian
RUSS0320E S01 26768 Crime and Punishment Vladimir Golstein

Sociology
SOC0100D S01 26503 Who Am I? Gregory Elliott
SOC0300F S01 26505 HIV/AIDS Politics, Cultur + Soc Nitsan Chorev
SOC0300F S01 26506 Unequal From Birth Margot Jackson

Fall

Africana Studies
AFRI1150 S01 16652 Afro-Caribbean Philosophy Paget Henry

American Civilization
AMCV1610A S01 16905 Amer Advertng: Hist and Conseq Susan Smulian
AMCV1900F S01 16909 Transnational Popular Culture Susan Smulian

American Sign Language
SIGN1910 S01 14272 Independent Study Arkady Belozovsky

Anthropology
ANTH0110 S01 17091 Anthro + Global Social Problems Bianca Dahl
ANTH0200 S01 17092 Culture and Human Behavior Marida Hollos

Archaeology and the Ancient World
ARCH0420 S01 15790 Archaeologies of Greek Past Susan Alcock

Biology and Medicine
BIOLO310 S01 16965 Intro to Developmental Biology Kristi Wharton
BIOLO380 S01 13636 Eco + Evo Infectious Disease Daniel Weinreich

Classics
CLAS0010 S01 14330 The Greeks Johanna Hanink

Comparative Literature
COLT1421R S01 16633 The European Novel Marc Redfield

English
ENGL1760E S01 15421 Who's Afraid of Virginia Woolf Ravit Reichman
ENGL1561H S01 16771 The Brain and the Book Vanessa Ryan

Environmental Studies
ENVS0070C S01 16352 Transcending Transptn Impacts Kurt Teichert

Geological Sciences
GEOG0380 S01 13636 Eco + Evo Infectious Disease Daniel Weinreich

Gender and Sexuality Studies
GNSS0909C S01 23491 Reproductive Health Sarah Fox

Health
HISP0730 S01 15369 Early/Contmp Wrtr of Span Amer

History
HIST1430 S01 16933 Truth on Trial Caroline Castiglione

Modern Culture and Media
MCM0100 S01 11299 Intr to Modern Culture + Media Philip Rosen

Music
MUSC0021F S01 17161 Popular Music in Latin America

Physics
PHYS0100 S01 21799 Nature/Meaning Sci Explanation Leon Cooper
PHYS0111 S01 16330 Extra Dimensions

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
Africana Studies

(Primarily for Undergraduates)

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 disjunctions 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. DVPS LILE

0110 Freshman Seminar Series
Enrollment limited to 20 first year students.

0110C Autobiography of the Civil Rights Movement
Most of the rich written history of the civil rights movement originates from first-hand accounts documented in oral histories and autobiographies. This interdisciplinary course plots the milestones of the civil rights movement through the lens of several autobiographies. The aim is to critique autobiography as a historical document as well as use it to tell the stories of the civil rights movement. We will compare and contrast different texts, analyze content and map a history of the era. Students will work with a writing fellow to develop one critical paper and one autobiographical paper. Enrollment limited to 20 first year students. FYS

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. DVPS

0600 Race, Gender, and Urban Politics
This course will introduce students to the methods and practice of studying black urban life with a primary focus on US cities. We will critically examine the urban cultural studies debates concerned with race, gender, class and sexuality. The approach of the course will be interdisciplinary, drawing upon works from anthropology, literature, history, music, and film. Topics include tourism, immigration, poverty, popular culture, gentrification, violence, and criminalization. WRIT

0710 Topics in Africana Studies

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

0880 Hip Hop Music and Cultures
This course will explore both the history of the emergence of Hip Hop and the heated debates that surround it: aesthetics, censorship, violence, musical theft, originality, authenticity, the politics of cross-racial exchanges, urban black nihilism, and corporate influences on culture. These debates will be framed by our consideration of urban black life, African-American cultural formations, gender, representation, technology, commodification, pleasure and politics. Enrollment limited to 40. DVPS

0990 Black Lavender: Black Gay/Lesbian Plays/Dramatic Constructions in the American Theatre
An interdisciplinary approach to the study of plays that address the identities and issues of black gay men and lesbians and offers various perspectives from within and without the black gay and lesbian artistic communities. Focuses on analysis of unpublished titles. Also includes published works by Baraka, Bullins, Cobitt, Gibson, Holmes, West,
1020 Special Topics in Africana Studies

1020C The Afro-Luso-Brazilian Triangle
Examines three historical components of the South Atlantic in terms of history, culture, and contemporary political and economic consequences. European colonialism in Africa and Brazil constitutes the baseline for this exploration, but the long and tardy nature of Portuguese colonialism in Africa in comparison with other European colonial powers, especially in its post-World War II manifestations, is our starting point. DVPS

1050 Seminar in Africana Studies

1050A Advanced RPM Playwriting
Third level of RPM Playwriting; for students that have successfully completed RPM Playwriting and Intermediate RPM Playwriting (workshop). Instructor permission. Enrollment limited to 14.

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). Instructor's permission required. Enrollment limited to 13.

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). Instructor's permission required. Enrollment limited to 13. DVPS

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

1060 Seminar in Africana Studies

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. DVPS

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
American Civilization

(Primarily for Undergraduates)

0190 Seminar in American Civilization
Enrollment limited to 17 freshmen and sophomores. WRIT

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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urban planners, and a field trip to Boston's Chinatown. Enrollment limited to 17 freshmen and sophomores. WRT

Spr AMCV0190F S01 26916 'To Be Arranged' (R. Noche)

0190G The Fringe is the Fabric: Anti-Immigrant Movements in the United States
This course traces nativist anti-immigrant movements and violence in the United States. Starting in the colonial period and ending with contemporary issues, the course demonstrates how anti-immigrant movements occur across place and time and serve to police the boundaries of U.S. citizenship. The course relies on fiction, documentary films and other historical texts to highlight continuing violent conflicts. We focus on the use of "vigilante" violence and put contemporary discussions of immigration in a new frame. Enrollment limited to 17 freshmen and sophomores. WRT

Spr AMCV0190G S01 26919 TTh 2:30-3:50(11) (A. Rodriguez)

0190H Junkies, Robots, and Fight Clubs: Revisioning the "American Dream" in US Popular Culture
From fembots to fightclubs, this course explores our obsession with revisions of the American Dream. We examine film and literary translations of three recycled stories—Rags-to-Riches, the Open Road, and Domestic Bliss—to better understand how we narrate the "American" experience and consider how these nationalizing narratives construct race, class, and gender. Films and texts include "Stepford Wives," "Easy Rider," and "Wall Street." Enrollment limited to 17 freshmen and sophomores. WRT

Spr AMCV0190H S01 26918 MW 8:30-9:50(02) (C. Tripp)

0190X Gendered Mobility: Migrant Women Workers in a Globalized Economy
Today’s women workers migrate at a historically unprecedented rate. This class looks at Third World women who migrate for work in global cities. We examine their experiences through the intersectional lens of gender, race, class, and nationality. We also question the social, political, and economic forces that drive migration and draw women workers to specific destinations. Finally, we will look at the multiple inequalities these workers confront and the ways in which they negotiate and challenge them. Enrollment limited to 17 freshmen and sophomores. WRT

Spr AMCV0190X S01 25469 TTh 9:00-10:20(08) (M. Hwang)

0190Y Dead or Alive?: The American West in Popular Culture
This course traces the imagined Western frontier as seen in television, film, photographs, museum exhibits, art, tourism, amusement parks, performance, video games, and science fiction. It explores these imagined spaces through the lenses of popular and visual culture, placing the West within the larger social, cultural, economic, and political histories of the US. Both real and imagined, these images defined and consolidated the identities of Westerners and those who wanted to be Westerners. Enrollment limited to 17 freshmen and sophomores. WRT

Fall AMCV0190Y S01 16903 TTh 2:30-3:50(11) (A. Johnson)

(For Undergraduates and Graduates)

1010 Introduction to American Studies: American Icons
Why do certain American photos, novels, and films become "iconic?" What does the very word 'icon' mean? Studying a collection of American images, texts, places, and practices, this course investigates the key themes of American Studies. DVPS LILE

Spr AMCV1010 S01 26015 MWF 2:00-2:50(07) (E. Gorn)

1250B Gravestones and Burying Grounds
Students examine gravestones and burying grounds as material evidence of American cultural history. Themes include the forms of written language and visual imagery in colonial New England, changing roles of women and minorities in society, historical craft practices, implications of stylistic change, attitudes towards death and bereavement, and the material evidence of discrete cultural traditions. Includes field trips.

Fall AMCV1250B S01 16904 TTh 10:30-11:50(09) (R. Emlen)

1550 Methods in Public Humanities
A survey of the skills required for public humanities work. Presentations from local and national practitioners in a diverse range of public humanities topics: historic preservation, oral history, exhibition development, archival and curatorial skills, radio and television documentaries, public art, local history, and more. Enrollment limited to 50.

Spr AMCV1550 S01 23577 TTh 10:30-11:50(09) (A. Valk)

1560 Comparative Cultural Heritage: Hong Kong and New England
This 8-week summer course begins with four weeks in Hong Kong, exploring the ways that private individuals, institutions, and government have preserved the city's cultural heritage, examining the conflict and negotiation of economic and political interests in urban renewal and heritage conservation and preservation. The second four weeks are in Providence, where students will explore the history and present-day philosophy and politics of preserving sites and stories from Colonial times to the present, exploring historical archaeology, historic preservation, museum exhibition, and oral history. This is a double credit course. Enrollment limited to nine Brown students and nine from Hong Kong. S/NC

Sum AMCV1560 S01 60374 'To Be Arranged' (S. Lubar)

1610 Special Topics in American Civilization

1610A American Advertising: History and Consequences
Traces the history of American advertising, particularly in the 20th century, to understand the role advertising plays in our culture. Topics include the rise of national advertising, the economics of the advertising industry, the relation of advertising to consumption, the depiction of advertising in fiction and film, and broadcast advertising. LILE

Fall AMCV1610A S01 16905 MWF 11:00-11:50(04) (S. Smulyan)

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 literary writing within and against American and imported literary traditions and as creative contributions to an ongoing national discourse on immigration and ethnicity. DVPS

Fall AMCV1611A S01 14860 TTh 1:00-2:20(10) (R. Meckel)

1611M Trauma and the Shame of the Unspeakable: The Holocaust, Slavery, and Childhood Sexual Abuse
The problem of representing traumatic experience has been raised by philosophers, artists, and survivors. This course compares three historical situations by reading histories, memoirs, fictions, poems; viewing photographs and film; and analyzing the material cultural artifacts such as memorials. Readings will include Freud, Harriet Jacobs, La Capra, Primo Levi, Toni Morrison and "Maus" by Art Spiegelman.

Spr AMCV1611M S01 24051 MWF 1:00-1:50(06) (B. Haviland)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
1611O Early American Film
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).

Fall AMC1611O S01 16906 TTh 9:00-10:20(08) (Haviland)

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 AMC1611Z S01 24736 MWF 12:00-12:50(05) (R. Meckel)

1612B Celluloid America
In this course, we will explore 20th century American history through film, examining both the history of this quintessentially American medium and the way in which American history has been represented within the medium. Topics include the invention of the moving picture, the rise and fall of the Hollywood studio system, the emergence and evolution of film genres (westerns, film noir, Blaxploitation, etc.), race and film, and the future of cinema in the digital age.

The course meets two evenings per week, with the first half of each session dedicated to discussion of assigned readings and the second half to the screening and discussion of select films. To complete the course successfully, students will be expected to submit short (+/-2 pages) weekly essays and to complete a final project.

Sum AMC1612B S01 60263 MW 6:00-10:00 PM

1612D Cities of Sound: Place and History in American Pop Music
This course investigates the relationship between popular music and cities. We will look at a number of case studies from the history of music in the twentieth century. We will try to tease out the ways that certain places produce or influence certain sounds and the ways that musicians reflect on the places they come from in their music. Accordingly, we will consider both the social and cultural history of particular cities and regions--New Orleans, Memphis, Chicago, New York, Washington DC, and others--and aesthetic and cultural analyses of various forms of music--including blues, jazz, punk, hip-hop, and others. A good portion of this class will involve a group research project on a particular city and musical genre. Each group will present the results of their work to their classmates and each student will prepare a final paper on one musical document from the city their group chooses. Enrollment limited to 50.

Fall AMC1612D S01 15908 MWF 1:00-1:50(06) (S. Zipp)

1700 Interdisciplinary American Seminar
Usually taken in the junior year, this seminar is required of all concentrators in American Civilization.

1700F American Publics
Americans worry about the quality of their civic life and fear its decline. This junior seminar examines an important concept, the public sphere, in its popular and political dimensions as well as looking at the challenges to the boundaries of American public life. Who is a citizen and thus eligible to participate? The course pays particular attention to concerns about the impact of new media--print, broadcasting, the internet--and offers a range of possible final projects. Not open to freshmen or sophomores. Enrollment limited to 20. WRIT

Spr AMC1700F S01 25474 M 3:00-5:20(13) (S. Smulyan)

1700G Public Memory: Narratives of 9/11
On the tenth anniversary of the attacks of 9/11, this junior seminar will focus on a variety of types of narrative concerned with those events and their aftermath: documentary, testimony, stories, memoirs, novels, graphic novels and feature films. We will also study and visit some of the memorials and museums that have been proposed or created in connection to 9/11 and consider them in the context of public memory and public art. Course work will require a project that engages the question of the role of the humanities in the creation of the public memory of catastrophic events. Enrollment limited to 20 junior and senior American Civilization concentrators. WRIT

Fall AMC1700G S01 17168 Th 4:00-6:20(13) (Haviland)

1800 Honors Seminar
This seminar is designed for concentrators who plan to produce a senior honors project in American Civilization. We will discuss the wide range of forms that American Studies scholarship takes from the "traditional" thesis to websites, exhibits, performance and video productions. Students will begin to design a project to be completed in the senior year.

Spr AMC1800 S01 26660 'To Be Arranged' (Haviland)

1900 Undergraduate Seminars in American Civilization
These seminars are primarily for juniors and seniors. Undergraduates only. Priority will be given to senior and junior concentrators in American Civilization. Enrollment limited to 20.

1900F Transnational Popular Culture
This course looks at popular culture as a transnational phenomenon. Taking up issues of cultural imperialism, globalization, domestication, and the economics of the culture industry, the course considers the history of cultural flows, from nineteenth century topics such as Chinese opera in the U.S. and Wild West shows in Europe to twenty-first century fast food, anime, sports, Disney, and music. We will consider both the consumers and producers of popular culture in Europe, South America, Asia and Africa, as well as those in the United States. Enrollment limited to 20 juniors and seniors. LILE

Fall AMC1900F S01 16909 W 3:00-5:20(14) (S. Smulyan)

1903G Oral History and Community Memory
Students in this seminar will conduct oral history interviews and archival research to create an audio and visual history of one Providence neighborhood. Collected materials will be prepared for public presentation as a walking tour and web site. Enrollment limited to 20.

Fall AMC1903G S01 16907 T 4:00-6:20(13) (A. Valk)

1903P Please, Please Me
This seminar will investigate theories of pleasure and its representation in a range of fictional texts. What is it that makes a text pleasing and for whom? How do we talk about pleasure and explain it to others? I am especially interested in the representation of pleasure from the 1970s on. Enrollment limited to 20.

Spr AMC1903P S01 26661 W 3:00-5:20(14) (R. Rodriguez)

1904H 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. Limited to American Civilization concentrators. Enrollment limited to 20 juniors and seniors. Instructor permission required.

Fall AMC1904H S01 17005 M 3:00-5:20(13) (R. Meckel)

1904J The Asian American Movement: Communities, Politics and Culture
In 1969 students at S.F. State College invented a new social category; they called it Asian America. This seminar begins with an examination the Asian American Movement, its origins and aspirations, its ideological cross currents, its failures and enduring legacies. But the central question we will ask is, what relevance does the Asian

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
American Movement have for struggles for social justice today? Enrollment limited to 20 juniors and seniors.

Fall  AMCV1904J  S01  26915  Th 4:00-6:20(16)  (R. Lee)

**1904M Erasing the Urban Deficit**
Examines the science, politics, and programs of the 19th and early 20th century urban public health movement. Scope will be national but the focus will be on Providence, particularly during the tenure of Charles Chapin as Superintendent of Health. Will result in the mounting of an exhibit illustrating and explaining one of facet of the movement. Enrollment limited to 20 juniors and seniors.

Spr  AMCV1904M  S01  26921  Th 4:00-6:20(16)  (R. Meckel)

**1970 Independent Reading and Research**
Required of all honors candidates in the senior year. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor’s permission required.
Fall; Spr

(Primarily for Graduates)

**2010 Introduction to Interdisciplinary Methods**
Introduction to interdisciplinary studies required of all first-year graduate students in American civilization. Graduate students from other departments may enroll with permission of the instructor.

Fall  AMCV2010  S01  14115  Th 4:00-6:20(13)  (E. Gorn)

**2220D Museums in Their Communities**
This seminar examines in detail the internal workings of museums (of anthropology, art, history, science, etc.) and their place in their communities. Accessions, collections management, conservations, education, exhibition, marketing, research, and museum management are among the topics discussed. Open to graduate students only.

Spr  AMCV2220D  S01  26219  W 3:00-5:20(14)  (S. Lubar)

**2520 American Studies: Professional Issues in American Studies**
Examines the methodological and theoretical underpinnings of current and past American studies scholarship. Enrollment limited to graduate students with preference given to American Civilization graduate students.

Fall  AMCV2520  S01  11105  ‘To Be Arranged’  (S. Smulyan)

**2550 Theorizing Asian America**

**2550C Advanced Seminar on Asian American History**
Advanced seminar on Asian-American history, diaspora studies and globalization.

Fall  AMCV2550C  S01  16908  W 3:00-5:20(14)  (R. Lee)

**2650 Introduction to Public Humanities**
This class, a foundational course for the MA in Public Humanities with preference given to American Civilization graduate students, will address the theoretical bases of the public humanities, including topics of history and memory, museums and memorials, the roles of expertise and experience, community cultural development, and material culture. Enrollment limited to 20 graduate students.

Fall  AMCV2650  S01  13640  W 3:00-5:20(14)  (S. Lubar)

**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  AMCV2670  S01  13738  ‘To Be Arranged’  (A. Valk)
Spr  AMCV2670  S01  26925  ‘To Be Arranged’  (A. Valk)

**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  AMCV2680  S01  15658  ‘To Be Arranged’  (A. Valk)
Spr  AMCV2680  S01  26926  ‘To Be Arranged’  (A. Valk)

**2920 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. Instructor’s permission required.
Fall; Spr

**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  AMCV2990  S01  11111  ‘To Be Arranged’
Spr  AMCV2990  S01  20799  ‘To Be Arranged’

**Anthropology (Primarily for Undergraduates)**

**0066 Seminars**
Enrollment limited to 20 first year students.

**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 DVPS

Fall  ANTH0066D  S01  17087  M 3:00-5:20(13)  (P. Rubertone)

**0066F Families and Households**
This course explores the diversity of families and households, both between cultures and within cultures; changes in family forms over time, changing experiences of family over the life course, the diverse meanings, metaphors, and values of "family"; and current controversies about what families are and what they should be. Enrollment limited to 20 first year students. FYS

Fall  ANTH0066F  S01  16896  Th 3:00-5:20(13)  (N. Townsend)

**0066J So You Want to Change the World?**
Examines from an anthropological perspective efforts to address global poverty that are typically labeled as "development." The enterprise of development is considered critically, both with regard to the intentions and purposes that underlie the actions of wealthy countries, donor organizations, and expatriate development workers and with regard to the outcomes for the people who are the intended beneficiaries.

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Privileging the perspectives of ordinary people in developing countries, but also looking carefully at the institutions involved in development, the course relies heavily on ethnographic case studies that will draw students into the complexity of one of the greatest contemporary global problems: social inequality. Enrollment limited to 20 first year students. FYS DVPS LILE

0100 Introduction to Cultural Anthropology
This course provides an introduction to cultural anthropology, surveying its defining questions, methods, and findings. We will examine the history and utility of anthropology’s hallmark method, ethnography, the long-term immersion of the researcher in the culture under study. We will compare cultural anthropology’s findings and comportment in other cultures to its conclusions and conduct in our own. No prerequisites. DVPS LILE

Sum ANTH0100 S01 60264 MWF 4:00-6:40
Spr ANTH0100 S01 21027 TTh 1:00-2:20(10) (J. Leinaweaver)

0110 Anthropology and Global Social Problems
The course introduces anthropological approaches to some of the central problems humans face around the world, including environmental degradation and cultures of consumption, hunger and affluence, war, racial division and other forms of inequality. LILE

Fall ANTH0110 S01 17091 MWF 2:00-2:50(07) (B. Dahl)

0125 Violence and the State
This course allows students the opportunity to interrogate the relation between violence and the state. Students will be introduced to a variety of analytical frames through which to understand both the concept of violence and that of the state from an anthropological perspective. Through diverse case studies we will consider topics such as what it means to see and be seen by the state, the rationalization of “exceptional” violence, and domination through symbolic violence. The course has no prerequisites, but a foundational course in the social sciences is recommended.

Sum ANTH0125 S01 60265 MWF 1:00-3:40 (J. Ashley)

0200 Culture and Human Behavior
The goal is to challenge our beliefs about some taken for granted assumptions about human behavior and psyche by examining cultures with different conceptions of self and cognition. We will examine the issues of the role of nature and nurture in development, the nature of intelligence, coming of age, the association of psychological characteristics with gender and the naturalness of emotions. DVPS LILE

Fall ANTH0200 S01 17092 MWF 10:00-10:50(03) (M. Hollos)

0300 Culture and Health
An introduction to the field of Medical Anthropology, Lecture reading and discussion will examine the social context of health and illness, looking at the diverse ways in which humans use cultural resources to cope with disease and develop medical systems. The course will provide an introduction to the overall theoretical frameworks that guide anthropological approaches to studying human health related behavior. Medical anthropology offers a unique and revealing perspective on the cultural diversity that characterized the universal human experience of sexuality, disease, aging, mental illness, disability, inequality and death. DVPS LILE

Fall ANTH0300 S01 14352 MWF 11:00-11:50(04)

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. WRIT

Fall ANTH0310 S01 16897 TTh 2:30-3:50(11) (A. Scherer)

Spr ANTH0066J S01 26653 M 3:00-5:20(13) (B. Dahl)

0450 Two Billion Cars: Humans, Markets, Cultures, and the Automobile
The global car population is predicted to reach two billion by the year 2020. The social, political, health, and environmental consequences are immense. These, as well as the cultural and political economic explanations for the car population explosion, will be explored in this class, as will alternative futures for transit. DVPS LILE

Spr ANTH0450 S01 26948 TTh 2:30-3:50(11) (C. Lutz)

0500 Discovering the Past: Introduction to Archaeology and Prehistory
This course is an introduction to the biological origins and cultural developments of mankind over the past 4 millions years. In particular we shall address the following: human evolution, the methods and aims of archaeological research, human dispersal throughout the world, first from Africa to Eurasia, and from there to North and South America, Australia and the Pacific. We will look into hunting and fishing and gathering lifeways. We will study the beginnings and results of settled life, agriculture, and animal domestication, the evolution of complex societies and rise (and fall) of Civilization. LILE

Spr ANTH0500 S01 26655 MWF 10:00-10:50(03) (D. Anderson)

0800 Sound and Symbols: Introduction to Linguistic Anthropology
An introduction to the relationship between language and culture. Questions we consider include: how does language create social realities? How does language construct us as individuals and mark us as members of groups? What role does language play in processes like socialization, globalization, and domination? Topics we cover include theories of language as a symbolic system, language differences and inequality, political speech, and creative use of language in performance, literature, advertising, and mass media. We also consider language use in specific social contexts, such as classrooms, courtrooms, medical and scientific settings, policy debates, and political campaigns. Enrollment limited to 40. DVPS LILE

Spr ANTH0800 S01 23656 TTh 9:00-10:20(08) (B. Schulthies)

(For Undergraduates and Graduates)

1110 African Issues in Anthropological Perspective
Western ideas of Africa are dominated by images of a primitive and timeless past and of a present characterized by poverty, AIDS, famine, and violence. In reality, Africa is a vast continent with a rich history and a population of half a billion people who live in very varied physical, economic, political, and cultural environments. We will read fiction by African authors, see African films, look at African art, and listen to African music. Goals of the course are: 1) Learn about the lives of a variety of Africans at particular times and in particular places, 2) Know the outline of the history that has formed the African present, 3) Understand specific world views and patterns of belief that have been described as typically African, and 4) Investigate the possibility, and the problems, of generalizing about Africa. DVPS LILE

Spr ANTH1110 S01 21028 TTh 1:00-2:20(10) (N. Townsend)

1124 United States Culture
The United States is often described as "multi-cultural". This course examines dominant cultural values such as equality, choice, privacy, and responsibility. It also investigates aspects of the social structure of the United States such as inequality, power, race/ethnicity, kinship, and gender. Individual lives illustrate the ways that people living in the United States negotiate cultural values and confront social institutions. DVPS LILE

Fall ANTH1124 S01 17093 MWF 12:00-12:50(12)

1131 Indian Issues in Anthropological Perspective: Issues and Debates
We will cover anthropological issues and themes about contemporary India, aspects of Hinduism and Islam, and the role of ideology in the
social structure. Using anthropological ethnographic texts and
discourse, we will discuss and explore different Indian communities,
family and kinship relations, class and the caste system, political and
religious organizations. The course will adopt a multidisciplinary
approach to the understanding of India. For comparative purposes we
will use select Indian novels and documentary films as a teaching tool
to supplement the reading materials.

Fall ANTH1131 S01 16898 TTh 10:30-11:50(09) (L. Fruzzetti)

1151 Ethnographies of the Muslim Middle East
This course is an introduction to ethnographic studies of the Muslim
Middle East, with particular focus on: religion, language, modernity,
gender, and expressive culture. This is not a comprehensive survey of
Middle Eastern history or politics. Rather, it is a critical examination of
the ways in which anthropologists have sought to capture Middle Eastern
lives, and the problems that have perverted anthropological
representation, both methodologically and theoretically. Thus, in this
course you will learn, through the ways in which American
anthropologists have sought to depict Middle Eastern "others," the
processes by which we come to understand cultural difference, as well
as the ways in which this encounter can shed light on our own selves
and practices. A previous course in anthropology is suggested.
Enrollment limited to 20. DVPS LILE

Fall ANTH1151 S01 16977 T 4:00-6:20(13) (B. Schulties)

1211 Cross Cultural Perspectives on Children
Explores how the behavior and psychological functioning of children
are shaped by culture and how different cultures tend to produce
children with characteristc personalities, selves, thought patterns and
behaviors. Every cultural community provides developmental pathways
for children. These pathways are shaped by history and by the goals of
parents, communities and children themselves. The course will focus
on how human knowledge is transmitted through multiple cultural
channels in both informal and formal contexts. This is a service-
learning course in which students provide a needed service:
Mentoring and tutoring Liberian young people in a literacy program.
Will serve as a basis for conducting research on this refugee
population and the final paper will be the recording of oral histories
from teenagers. Enrollment limited to 30. DVPS

Spr ANTH1211 S01 26836 TTh 2:30-3:50(11) (M. Hollos)

1240 Religion and Culture
Looking at religion as a mode of thought, we examine theories that
try to explain the origins, world-wide manifestation, and vitality of
myths, rituals, magic, witchcraft, and other ways of thinking and acting
that are typically associated with (or against) the concept of religion.
Collaterally, we examine the methodologies by which we hope to
understand the meaning of these concepts. DVPS LILE

Spr ANTH1240 S01 25566 TTh 9:00-10:20(08) (W. Simmons)

1251 Violence and the Media
The role of media in shaping perceptions of violent conflict. Analysis of
constructions of the "violent other", "victims", and "suffering", the use of
culture, ethnicity, and psychopathology as tropes for articulating the
motivations of violent perpetrators. Multiple subject positions and
political interests will be considered. Case studies include the Cold
War, conflicts, insurgencies urban riots, the genocide, and terrorism.
Pre-requisite: a previous course in Anthropology, or permission of the
instructor. Enrollment limited to 60. Students MUST register for a
filming/screening, and a lecture section.

Spr ANTH1251 S01 26834 TTh 4:00-5:20(16) (K. Warren)

1324 Money, Work, and Power: Culture and Economics
Economic activities take place within cultural contexts which define
appropriate values and goals, and in societies varying in scale,
technology, and organization. Looking cross-culturally, and at
economic activities in societies such as the United States, this course
examines the production, distribution, and consumption of material
goods, analyzing these as essentially social activities - properly
understood only when we take account of social relations and cultural
values. Consequently, the course also investigates the extent to which
the words commonly used to describe economic life, such as "market",
"wealth", "price", "profit", "work", and "money", are culturally specific
rather than universally applicable. At least one previous course in
Anthropology or another social science is strongly recommended.

Fall ANTH1324 S01 17193 TTh 10:30-11:50(09) (N. Townsend)

1411 Nations within States
Examines the interactions between small-scale indigenous societies
(often referred to as Fourth World Nations) and the modern states
within which they now exist. The relationship is obviously
asymmetrical, yet these ethnic or "racial" minorities have the support of
world opinion and international organizations. The sociocultural,
economic, and political structure of these nations within states is the
focus of the course. DVPS

Spr ANTH1411 S01 26837 TTh 2:30-3:50(11) (D. Anderson)

1621 Material Culture Practicum
Combines theory with hands-on study of material culture in historical
archaeology. Students gain skills and experience in identifying, dating,
recording, analyzing, and interpreting artifacts and conduct individual
or team research projects. Enrollment limited to 15. LILE

Fall ANTH1621 S01 17102 MWF 1:00-1:50(06)

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 gravestones and monuments reveal about
beliefs and emotions? Current cultural and legal challenges to the
excavation and study of the dead are also considered. DVPS LILE

Spr ANTH1623 S01 26835 MWF 11:00-11:50(04) (P. Rubertone)

1640 Maize Gods and Feathered Serpents: Mexico and Central
America in Antiquity
Mexico and Central America are the cradles of one of the world's most
during cultural traditions. The modern identity of the region was
forged in these ancient traditions and their influence is apparent the
world over, particularly in the area of agricultural domesticates (corn,
chocolate, and chilies). Their cities (Teotihuacan, Monte Alban,
Chichen Itza, etc.) rank among the greatest of the ancient world. This
course offers a survey of Pre-Columbian Mexico and Central America,
from the early monumental centers of the Olmec to the great Aztec
city of Tenochtitlan, and explores how anthropologists and archaeologists
investigate Middle America's indigenous past.

Spr ANTH1640 S01 26861 MW 3:00-4:20 (A. Scherer)

1670 Global Origins of Plant and Animal Domestication
A seminar providing the basic information on the prehistory of the
Circum Arctic of Northern Fennoscandia, Russia, and North
America. Not open to first year students.

Spr ANTH1670 S01 26839 MW 2:00-2:50(07) (D. Anderson)
and gave it its identity? influenced the discipline's history? Who were the significant, and not so gateway into narratives of the past--from the evolution of our species to More than simply a tissue within our bodies, the human skeleton is gateway into narratives of the past--from the evolution of our species to More than simply a tissue within our bodies, the human skeleton is

1720 The Human Skeleton
More than simply a tissue within our bodies, the human skeleton is gateway into narratives of the past--from the evolution of our species to medical, forensic, archaeological, and evolutionary perspectives. We will 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. Enrollment limited to 20. Not open to first year students. Instructor permission required. LILE

Spr ANTH1720 S01 26177 MWF 1:00-1:50(06) (A. Scherer)

1900 History of Anthropology: Anthropological Theories
Looks at the way anthropological methods and theories have intersected 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? With the discipline's history.

Spr ANTH1900 S01 26658 Th 3:00-5:20(16) (N. Townsend)

1910 Senior Seminar
Aims to provide a "capstone" to a concentration in anthropology through readings on, and critical discussions of, enduring and contemporary questions about our own society, about anthropology, and about reality. Enrollment limited to 20. Prerequisites ANTH 1621 or ANTH 1900 or ANTH 1940 or ANTH 1950.

Fall ANTH1910B S01 17199 W 3:00-5:20(14) (P. Rubertone)

1940 Ethnographic Research Methods
To understand the different theoretical assumptions that shape research efforts; to examine how hypotheses and research questions are formulated; and to appreciate the ethical and scientific dimensions of research by hands-on experience in fieldwork projects. Enrollment limited to 20. Prerequisite: One Anthropology course.

Spr ANTH1940 S01 26959 M 3:00-5:20(13) (L. Fruzzetti)

1970 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.

Fall; Spr

(Primarily for Graduates)

2000 History of Ethnological Theory
A seminar investigating some themes in the history of anthropological theory. Starting with the delineations of the scope and nature of social science by Marx, Durkheim, and Weber, the seminar then considers various explorations of the concepts of structure, function, and agency, concluding with Bourdieu's reformulation of social anthropology for a new generation in the form of practice theory.

Fall ANTH2000 S01 10806 M 3:00-5:20(13) (W. Simmons)

2010 Principles of Cultural Anthropology
A seminar exploring fundamental theoretical and ethnographic currents in 20th-century cultural anthropology.

Spr ANTH2010 S01 21031 W 3:00-5:20(14)

2020 Methods of Anthropological Research
A seminar on the methodological problems associated with field research in social and cultural anthropology. Designed to help students prepare for both summer and dissertation research.

Spr ANTH2020 S01 26840 T "To Be Arranged" (M. Hollos)

2035 Professional Preparation for Anthropologists
This course covers research ethics and politics, writing of proposals, theses, and articles, publishing, public speaking, CVs and resumes, and the job search. Enrollment limited to 8.

Spr ANTH2035 S01 26841 T 9:30-11:50(09) (M. Brink-Danan)

2303 Anthropology of Fertility and Reproduction
A seminar examining the social significance and cultural meanings of human fertility and reproduction, including the social and cultural consequences of different fertility levels, the variety of people involved in decisions about reproduction, the allocation of responsibility for parenthood, and the political implications of contemporary debates about the meanings of biological and social reproduction.

Fall ANTH2303 S01 17094 T 1:30-3:50(11) (M. Hollos)

2304 Issues in Anthropology and Population
This seminar is intended for graduate students and postdoctoral fellows interested in anthropological approaches to population issues and is normally taken as the second course in a two-course sequence that begins with ANTH 2300. The overarching theme of the seminar is the contributions that sociocultural anthropology can make to the understanding of population processes.

Fall ANTH2304 S01 26842 F 2:30-4:50 (J. Leinaweaver)

2310 Graduate Seminar on Violence
This seminar deals with contemporary anthropological approaches to violence, governance, and transnationalism. As faculty and graduate students, we have worked together to identify important ethnographic experiments that provide novel anthropological framings of major global issues. Our goal is to interrogate anthropological writing, explore its relation to field research, and trace anthropological appropriations of contemporary social theory from a variety of sources. Prerequisites: three previous courses in Anthropology. Enrollment limited to 20.

Fall ANTH2310A S01 17095 M 6:00-8:20 PM(18) (K. Warren)

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.

Fall ANTH2320 S01 17090 Th 3:00-5:20(13) (L. Fruzzetti)

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 13138 W 3:00-5:20(14) (A. Scherer)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
20 / Applied Mathematics

2520 Mesoamerican Archaeology and Ethnohistory
Seminar focusing on current issues in the archaeology and history of Mesoamerica, including Mexico and Northern Central America. Draws on rich resources at Brown, including the John Carter Brown Library.

Spr ANTH2520 S01 26847 F 3:00-5:20(15)

2540 Historical Archaeology: From Colony to City
Examines historical archaeology as a complex field of inquiry that engages multiple sources of evidence and incorporates a wide range of theoretical and methodological approaches. The seminar will consider the range of evidence available to historical archaeologists, and draw on examples from colonies and cities around the world to explore how the richness and diversity of the evidence is used.

Fall ANTH2540 S01 16978 Th 4:00-6:20(13) (P. Rubertone)

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 21802 M 3:00-5:20(13) (B. Schulthies)

2900 Teaching Practicum
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 ANTH2900 S01 10835 "To Be Arranged"
Spr ANTH2900 S01 20634 "To Be Arranged"

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 10838 "To Be Arranged"
Spr ANTH2970 S01 20635 "To Be Arranged"

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. Fall; Spr

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 10843 "To Be Arranged"
Spr ANTH2990 S01 20636 "To Be Arranged"

Fall XLIST Courses of Interest to Students Concentrating in Anthropology
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.

Africana Studies
AFRI 0710A Race, Gender, and Politics
AFRI 1020D Race, Rights, and Rebellion
AFRI 1440 Theorizing the Black Diaspora

American Civilizations
AMCV 1904F The American Experience: The Southeast Asian Refugees/Americans

Archaeology and the Ancient World
ARCH 0100 Old World and New World Perspectives in Archaeology
ARCH 0330 Archaeology Under the Volcano
ARCH 0440 Archaeologies of the Ancient "Middle East"
ARCH 1050 Old World and New World Perspectives in Archaeology
ARCH 1120L Archaeology of Feasting
ARCH 1810 Under the Tower of Babel: Archaeology, Politics and Identity
ARCH 1820 The Location of Theory
ARCH 1860 Engineering Material Culture
ARCH 2010C Architecture, Body, and Performance in the Ancient Near Eastern World
ARCH 2450 Trading Places: Archaeology, Economy and Exchange

Classics
CLAS 0210O Sports in the Ancient Greek World
Cognitive, Linguistic, and Psychological Science
CLPS 0810 Biology and Evolution of Language

Community Health
PHP 1070 The Burden of Disease in Developing Countries

Judaic Studies
JUDS 0870 Israeli Society
JUDS 0980G Global Culture: Religion, Migration and Diaspora

Latin American Studies
LAST 1510J The Making of Modern Brazil

Portuguese and Brazilian Studies
POBS 16000 Displacement: Colonialism, Migration and Transnationalism in Lusophone Societies

Applied Mathematics

(Primarily for Undergraduates)

0160 Introduction to Scientific Computing
For student 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.

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkssearch_public_P_Main).
### 0330 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 AP68 or AP68 for a minimum score of 5.

#### Fall
- APMA0330 S01 60267 MTWTh 9:00-11:00 (V. Dobrushkin)
- APMA0330 S01 11056 MW 12:00-12:50 (V. Dobrushkin)

#### Spr
- APMA0330 S01 21243 MW 12:00-12:50 (Y. Guo)

### 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 AP68 or AP68 for a minimum score of 5.

#### Fall
- APMA0340 S01 60267 MTWTh 1:00-3:00 (V. Dobrushkin)
- APMA0340 S01 11089 MW 12:00-12:50 (V. Dobrushkin)

#### Spr
- APMA0340 S01 21245 MTWTh 10:30-11:50 (C. Dafermos)

### 0350 Methods of Applied Mathematics I, II
Covers the same material as APMA 0330, 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 AP68 or AP68 for a minimum score of 5.

#### Fall
- APMA0350 S01 11087 MW 12:00-12:50 (H. Dong)

### 0360 Methods of Applied Mathematics I, II
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 AP68 or AP68 for a minimum score of 5.

#### Spr
- APMA0360 S01 20800 MW 12:00-12:50 (T. Nguyen)

### 0410 Mathematical Methods in the Brain Sciences
Basic mathematical methods commonly used in the neural and cognitive sciences. Topics include: introduction to probability and statistics, emphasizing hypothesis testing and modern nonparametric methods; introduction to differential equations and systems of differential equations, emphasizing qualitative behavior and simple phase-plane analysis. Examples from neuroscience, cognitive science, and other sciences. Prerequisite: MATH 0100 or equivalent.

#### Fall
- APMA0410 S01 11124 MW 2:00-2:50 (L. Bienven stock)

### 0650 Essential Statistics

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
22 / Applied Mathematics

dimensions. Fractals: definition and examples. Lorentz attractor, Hamiltonian systems, homoclinic orbits and Smale horseshoe orbits. Chaos in finite dimensions and in PDEs. Can be used to fulfill the senior seminar requirement in applied mathematics. Prerequisites: differential equations and linear algebra.

Spr APMA1360 S01 23830 MWF 1:00-1:50(06) (G. Menon)

1650 Statistical Inference I
APMA 1650 begins 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: MATH 0100, 0170, 0180, 0190, 0200, or 0350.
Fall APMA1650 S01 11183 TTh 1:00-2:20(10) (H. Wang)

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 or equivalent, basic linear algebra.
Spr APMA1660 S01 26596 TTh 1:00-2:20(10) (S. Geman)

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 processes, Markov chains, Monte Carlo methods, and randomization. Applications of Monte Carlo methods and pseudorandom numbers. Prerequisite: one course in probability, statistics, or computer science.
Fall APMA1690 S01 17023 MWF 9:00-9:50(02) (M. Harrison)

1710 Information Theory
Information theory is the study of the fundamental limits of information transmission and storage. This course, intended primarily for advanced undergraduates and beginning graduate students, offers a broad introduction to information theory and its applications: Entropy and information, lossless data compression, communication in the presence of noise, channel capacity, channel coding, source-channel separation, lossy data compression. Prerequisite: one course in probability.
Fall APMA1710 S01 13717 MWF 11:00-11:50(04) (S. Geman)

1940 Senior Seminar
The courses mentioned below are senior seminars.

1940R Linear and Nonlinear Waves
From sound and light waves to water waves and traffic jams, wave phenomena are everywhere around us. In this seminar, we will discuss linear and nonlinear waves as well as the propagation of wave packets. Among the tools we shall use and learn about are numerical simulations in Matlab and analytical techniques from ordinary and partial differential equations. We will also explore applications in nonlinear optics and to traffic flow problems. Prerequisites: MATH 0180 and either APMA 0330-0340 or APMA 0350-0360. No background in partial differential equations is required.
Spr APMA1940R S01 26961 "To Be Arranged" (B. Sandstede)

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.
Fall; Spr
an introduction to the dynamics of complex fluids. Topics covered include: boundary layers and secondary flows, perturbation methods, flow stability and transition phenomena, surface tension effects, mixing and dispersion, overview of suspension flows and non-Newtonian fluids. Prerequisite: APMA 2410, ENGN 2810 or equivalent.

Spr APMA2420 S01 23493 MWF 2:00-2:50(07) (M. Maxey)

2550 Numerical Solution of Partial Differential Equations I
Finite difference methods for solving time-dependent initial value problems of partial differential equations. Fundamental concepts of consistency, accuracy, stability and convergence of finite difference methods will be covered. Associated well-posedness theory for linear time-dependent PDEs will also be covered. Some knowledge of computer programming expected.

Fall APMA2550 S01 11261 W 3:00-5:20(14) (C. Shu)

2560 Numerical Solution of Partial Differential Equations II
An introduction to weighted residual methods, specifically spectral, finite element and spectral element methods. Topics include a review of variational calculus, the Rayleigh-Ritz method, approximation properties of spectral end finite element methods, and solution techniques. Homework will include both theoretical and computational problems.

Spr APMA2560 S01 21026 W 3:00-5:20(14) (G. Karniadakis)

2570 Numerical Solution of Partial Differential Equations III
We will cover finite difference and other methods for solving hyperbolic partial differential equations. 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. May be repeated once for credit.

Fall APMA2570 S01 11423 M 3:00-5:20(13) (J. Guzman)

2580 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 APMA2580 S01 25635 M 3:00-5:20(13) (C. Shu)

2610 Recent Applications of Probability and Statistics
This is a topics course, covering a selection of modern applications of probability and statistics in the computational, cognitive, engineering, and neural sciences. The course will be rigorous, but the emphasis will be on application. Topics will likely include: Markov chains and their applications to MCMC computing and hidden Markov models; Dependency graphs and Bayesian networks; parameter estimation and the EM algorithm; Nonparametric statistics ("learning theory"), including consistency, bias/variance tradeoff, and regularization; Gibbs distributions, maximum entropy, and their connections to large deviations. Each topic will be introduced with several lectures on the mathematical underpinnings, and concluded with a computer project, carried out by each student individually, demonstrating the mathematics and the utility of the approach.

Spr APMA2610 S01 25636 MWF 11:00-11:50(04) (M. Harrison)

2630 Theory of Probability
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 11424 TTh 1:00-2:20(10) (B. Rozovsky)

2640 Theory of Probability
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 Itô’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 21024 TTh 1:00-2:20(10) (B. Rozovsky)

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 (E-M Algorithm, Markov Chain Monte Carlo, Bootstrap). Prerequisite: APMA 2630 or equivalent.

Fall APMA2670 S01 15799 TTh 4:00-5:20(13) (B. Gidas)

2820 Seminars in Applied Mathematics
The courses mentioned below are graduate level seminars.

2821N Numerical Solution of Ordinary Differential Equations: IVP Problems and PDE Related Issues
The course seeks to lay the foundation for the development and analysis of numerical methods for solving systems of ordinary differential equations. With a dual emphasis on analysis and efficient implementations, we shall develop the theory for multistage methods (Runge-Kutta type) and multi-step methods (Adams/BDF methods). The discussion includes definitions of different notions of stability, stiffness and stability regions, global/local error estimation, and error control. We also discuss more specialized topics such as symplectic integration methods, parallel-in-time methods, include splitting methods, methods for differential-algebraic equations (DAE), deferred correction methods, and order reduction problems for IBVP, TVD and IMEX methods.

Spr APMA2821N S01 26769 ‘To Be Arranged’ (J. Hesthaven)

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 APMA2970 S01 11628 ‘To Be Arranged’
Spr APMA2970 S01 21241 ‘To Be Arranged’

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

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 11629 ‘To Be Arranged’
Spr APMA2990 S01 21242 ‘To Be Arranged’

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
24 / Archaeology and the Ancient World

Arabic see Center for Language Studies

Archaeology and the Ancient World

(Primarily for Undergraduates)

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.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).

0150 Introduction to Egyptian Archaeology and Art
An introductory survey of the archaeology, art and architecture of ancient Egypt, ranging in time from the prehistoric cultures of the Nile Valley through the period of Roman control. While the course will examine famous features and characters of ancient Egypt (pyramids, mummies, King Tut!), it will also provide a wide-ranging review of the archaeology of this remarkable land.

0163 Ancient China: Art and Archaeology (HIAA 0110)
Interested students must register for HIAA 0110 S01 (CRN 16864).

0201 Sport in the Ancient Greek World (CLAS 0210O)
Interested students must register for CLAS 0210O S01 (CRN 16849).

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.

0311 Death and the Afterlife in the Ancient World (RELS 0750)
Interested students must register for RELS 0750 S01 (CRN 26409).

0420 Archaeologies of the Greek Past
From Bronze Age palaces to the Acropolis in Athens and on the trail of Alexander the Great, this course explores the ancient Greek world through archaeology—using art, architecture, and everyday objects to learn about ancient Greek society, from the mysterious to the mundane. It also considers how we experience ancient Greece today, including questions about archaeological practice, the antiquities trade, and cultural heritage. LILE

0522 Roman Art and Architecture: Spectacles and Entertainment (HIAA 0320)
Interested students must register for HIAA 0320 S01 (CRN 26625).

0540 Art, Archaeology and Civic Life from the End of the Republic through the Early Empire, 40 BCE-140 CE
This survey course will familiarize students with the art, architecture and literature of Rome during the early Imperial era (ca. 40 BC - AD 140), through investigation of significant sites, monuments and museum collections in Rome and southern Italy.

Sum ARCH0540 S01 60348 'To Be Arranged'

0680 Water, Culture and Power
Water is the source of life. In the midst of global climate change, environmental crises over water resources, and increasingly ubiquitous political debates over water, we are beginning to recognize humans' complete dependence on water. This course investigates our long-term attachment and engagement with water using archaeology, environmental history, and visual, literary and historical sources. From sacred spaces around springs to ancient cities by the sea, we will explore the cultural and political aspects of water beginning with the Last Ice Age and ending with late antiquity. Enrollment limited to 50 undergraduates.

0105 Old World and New World Perspectives in Archaeology
This course examines how archaeologists working on different sides of the world study the past. Archaeology in the Old World and New World has developed on parallel, but separate, trajectories. While these approaches share methods and theories, they often interpret archaeological data in alternative or even contradictory ways. In this course we will view archaeological topics from both perspectives, using examples from the Mediterranean and Mesoamerica, to try to better understand, and perhaps bridge the gap between, some of our differences. Prerequisite: An introductory course in archaeology, either through the Joukowsky Institute or the Anthropology department. Not open to first year students.

1200B Pompeii (HIAA 1200D)
Interested students must register for HIAA 1200D S01 (CRN 16869).

1475 Petra: Ancient Wonder, Modern Challenge
The rose-red city of Petra in southern Jordan is a movie star (Indiana Jones and the Last Crusade). It is a tourist mega-hit (over half a million visitors annually). It was recently voted one of the New 7 Wonders of the World. This class will explore the history and archaeology of Petra and debate how best to present and preserve the site, as well as discussing (and planning!) Brown's ongoing fieldwork at this beautiful, but fragile, place. Enrollment limited to 50. Not open to first year students.

1540 Cultural Heritage: The Players and Politics of Protecting the Past
From Antarctica to Zimbabwe, cultural heritage encompasses the very old and the still in use, the man-made and the natural, the permanent and the ephemeral -- even the invisible and the edible. This course will explore issues of modern threats to cultural heritage such as tourism and development, questions of authenticity and identity, and archaeology's intersection with law, ethics, public policy, and economics.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
1606 Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia (AWAS 1750)
Interested students must register for AWAS 1100 S01 (CRN 26392).

1607 Divination in Ancient Mesopotamia (AWAS 1750)
Interested students must register for AWAS 1750 S01 (CRN 16642).

1621 History of Egypt I (EGYT 1430)
Interested students must register for EGYT 1430 S01 (CRN 16646).

1710 Architecture and Memory
Buildings and monuments have been mediators of the past, with their powerful presence and often turbulent histories. Stories cling to their stones, which become residues of the human lives that shape them. Memories, imaginations and experiences, collectively shared or individual, give meaning to architectural spaces. This course explores the intersections of memory and architecture through various archaeological case studies from the ancient world.

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.

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.

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.

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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
26 / Biology and Medicine

0060 Introduction to Human Physiology
An introduction to human physiology aimed primarily at undergraduates who are not concentrating in biology. Topics include basic cardiovascular, respiratory, kidney, gastrointestinal, endocrine, and neuromuscular function, as well as aspects of reproduction and exercise physiology. Not for biology concentration credit. BIOL 0060 should not be taken following BIOL 0800 or the equivalent.

Sum BIOL0060 S01 60268 MTWTh 9:00-11:00 (A. Sobieraj)

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 20990 T 4:00-6:20(16) (B. Bready)

0150 Special Topics: Introduction to Biological Investigation
Encompasses group directed research courses, geared for beginning-level students with basic biology background, who are keen on an early "research experience." Sections feature immediate hands-on exposure to techniques, experimental design and execution, and methodology in evaluating data. Each section will undertake a lab- or field-based project that involves a real research investigation. These are intended as additions to a four-course load. Enrollment for each section is limited to 10 freshmen and sophomores. Instructor permission required. This is a half-credit course. S/NC

0150A Techniques and Analyses using DNA-Based Biotechnology
The development of powerful tools in molecular biology has led to an explosion in our understanding of genes and the factors controlling their expression. Illuminating research, including recent Nobel Prize winning work, is beginning to reveal the significant role of RNA, a molecule long thought to be merely a "messenger." Through extensive laboratory work, students will acquire skills used in current research in molecular biology while examining the many ways in which these tools are being used in both research and in the development of medical treatments. Expected background: a high school Biology course. Enrollment limited to 10 freshmen and sophomores. Instructor permission required. This is a half-credit course. S/NC

Spr BIOL0150A S01 26707 'To Be Arranged' (J. Hall)

0150B Modeling and Statistics in Biomedical Research
In the current interdisciplinary climate of biology strong quantitative and computational skills allow us to model and understand many biological questions, including biomedical research topics. Students will develop statistics and computational skills by evaluating the fit of theoretical models to empirical data collected from the primary literature. Emphasis will be placed on linear regression, higher order polynomials, and F tests. Expected background: AP Biology (or equivalent), or instructor permission. Enrollment limited to 10 freshmen and sophomores. Instructor permission required. This is a half-credit course. S/NC

Fall BIOL0150B S01 16963 'To Be Arranged' (J. Knies)

0150C Methods for Extraction and Analyzing Secondary Metabolites of Medicinal Plants
Plant secondary metabolites are currently the subject of much research interest when investigating new target compounds for potential medicine from natural products. New leads for drugs and phytochemicals from plants and plant parts have been increasing at a rapid rate especially by the pharmaceutical industry. Many plants have been selected and collected for their specific secondary compounds and healing powers by ethnomedists in the field. The final step is the extraction, analyzing and identification of these plant specimens. Enrollment limited to 10 freshmen and sophomores. Instructor permission required. This is a half-credit course. S/NC

Fall BIOL0150C S01 16964 'To Be Arranged' (F. Jackson)

0150D Techniques in Regenerative Medicine: Cells, Scaffolds and Staining
Regenerative Medicine, also known as Tissue Engineering, is the process of creating living, functional tissue 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 histological characterization of mammalian cell constructs. Enrollment limited to 10 freshmen and sophomores. Instructor permission required. This is a half-credit course. S/NC

Spr BIOL0150D S01 26708 'To Be Arranged' (B. Zielinski)

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 biotechnological 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. Students MUST register for the lecture section and a conference. This course does carry Biology concentration credit.

Fall BIOL0170 S01 11393 MWF 12:00-12:50(12) (B. Zielinski)

0180 The Biology of AIDS
AIDS represents an example of the vulnerability of humans to new infectious agents. We will review some human infectious diseases including small pox yellow fever and influenza, and then explore AIDS/HIV. First characterized in 1981, AIDS became the leading cause of death in U.S. males aged 25-44 within a decade. We will examine what factors make HIV such a potent pathogen. The course is intended for students beginning in biology. Expected: BIOL 0200, or equivalent placement. This course does carry Biology concentration credit. Enrollment limited to 20.

Fall BIOL0180 S01 16960 MWF 2:00-2:50(07) (P. Shank)

0190 Biology Foundations Courses
Students beginning in college-level biology are encouraged to choose a section of BIOL 0190, courses that introduce biological sciences within the framework of particular topics. BIOL 0190 courses do carry concentration credit in biology programs. In order to assure student/faculty interaction, these sections are limited in size. BIOL 0190 courses are often suitable for students entering with AP biology credit. Some of these courses are designated as First Year Seminars.

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

Spr BIOL0190E S01 21029 MW 3:00-4:20(13) (F. Jackson)

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 15857 TTH 1:00-2:20(10) (M. Tatar)**

*0190H Plants, Food, and People*
Examines the selection, breeding, cultivation and uses of food plants. Discusses the effects on agriculture of pathogens, climate change, and loss of biodiversity. Considers whether enough food can be produced for a world population of potentially 10 billion, while sustaining biodiversity and environmental quality. Enrollment limited to 40. Instructor’s permission required. LILE.

Spr BIOL0190H S01 26702 MW 3:00-4:20(13) (P. Heywood)

**0190D Conservation Medicine**
Conservation Medicine is an emerging, interdisciplinary field that studies the relationship between human health, wildlife disease, and environmental conditions. In this first-year seminar we will explore the links between changes to the environment, including exotic species invasions, land-use, and climate change, and the emergence of infectious diseases in humans and wildlife. We will assess the implications of emerging infectious disease and the tools used to prevent them. We will survey contemporary issues in conservation medicine through case studies of emerging infectious diseases linked to environmental change. Enrollment limited to 20 first year students. FYS LILE

Spr BIOL0190D S01 26703 W 3:00-5:20(14) (K. Smith)

**0190P Development of Scientific Theories: Context and the Individual**
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

Fall BIOL0190P S01 13702 TTH 2:30-3:50(11) (S. Helfand)

**0190R Phage Hunters, Part I**
A research-based lab class for freshmen; both semesters are required. Students will isolate and characterize a bacteriophage viruses found in the soil. Lab work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several phages will be selected for genome sequencing over winter break, and are annotated in the spring. One hour lecture and discussion, and 3 hours lab per week. Expected: AP Biology or equivalent, HS chemistry, and permission of the instructor. Expected to take both fall and spring courses in this sequence. Enrollment limited to 20 first year students. FYS

Fall BIOL0190R S01 17192 ‘To Be Arranged’ (P. Shank)

**0190S Phage Hunters, Part II**
A research-based laboratory class for freshmen; both semesters are required. Students will isolate and characterize a bacteriophage viruses found in the soil. Lab work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several phages will be selected for genome sequencing over winter break, and are 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 both fall and spring courses in the sequence. Enrollment limited to 20 first year students. FYS

Spr BIOL0190S S01 26960 ‘To Be Arranged’ (P. Shank)

**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. LILE

Spr BIOL0200 S01 21039 MWF 11:00-11:50(04) (K. Miller)

**0280 Introductory Biochemistry**
Lectures and recitation sections explore the mechanisms involved in the principles of macromolecular structure and function, the organization and regulation of pathways for intermediary metabolism, and the transfer of information from genes to proteins. It is expected that students have taken CHEM 0350 or are taking it concurrently. Students MUST register for a conference, and a lecture section.

Spr BIOL0280 S01 21039 MWF 10:30-11:50(09) (A. Salomon)

**0300 Endocrinology**
A basic examination of endocrinology with emphasis on hormone biosynthesis, mechanism of action, physiological roles, and endocrine pathology. Topics include: mechanism of action of steroid, amine, and peptide hormones; neuroendocrinology; reproductive endocrinology; and endocrinology of metabolism and calcium homeostasis. It is expected that students have taken BIOL 0200 (or equivalent) and CHEM 0350.

Spr BIOL0300 S01 26704 TTH 10:30-11:50(09) (G. Messerlian)

**0310 Introduction to Developmental Biology**
An introductory level course focusing on the scientific principles and concepts governing development of animals and plants, evolutionary comparisons of these processes, and the ethical and social implications of these events. Expected: BIOL 0200, or equivalent. Enrollment limited to 30 freshmen and sophomores. LILE

Fall BIOL0310 S01 16965 TTH 1:00-2:20(10) (K. Wharton)

**0320 Vertebrate Embryology**
Introduction to the developmental anatomy of vertebrate embryos, including humans, in an evolutionary context, through lecture, discussion and microscopic study. Gametogenesis through germ layers and their organ system derivatives. Expected: BIOL 0200, or equivalent placement, or AP Biology score of 4 or 5. Limited to 18 freshmen and 18 sophomores. Students MUST register for the lecture section and the lab. Instructor permission required. DVPS

Spr BIOL0320 S01 21043 TTH 9:00-10:20(08) (M. Thompson)

**0380 The Ecology and Evolution of Infectious Disease**
We will survey the diverse biology of microbes responsible for human infectious disease, develop and apply ecological and evolutionary theory to infectious microbes, and provide practical experience interpreting and synthesizing the peer-reviewed scientific literature. The discovery of infectious microbes, the role of genetic novelty, population structure and transmission mode, and the influence of clinical therapies and host immune response will be considered. Evaluation will be based on preparation, participation, weekly student presentations, brief weekly written assignments, a midterm and a final. Expected: BIOL 0200 or equivalent. Enrollment limited to 25 freshmen and sophomores. Instructor permission required. LILE

Fall BIOL0380 S01 13636 MWF 10:00-10:50(03) (D. Weinreich)

**0400 Biological Design: Structural Architecture of Organisms**
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 living systems. LILE
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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 15861 MWF 2:00-2:50(07) (S. Swartz)

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. Students MUST register for the lecture section and a lab.

Fall BIOL0410 S01 11541 MWF 11:00-11:50(04) (C. Dunn)

0420 Principles of Ecology
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 0990. Lectures and weekly discussion.

Spr BIOL0420 S01 21066 TTh 9:00-10:20(08) (J. Witman)

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). Students MUST register for the lecture section and a lab. Enrollment limited to 36:WRIT

Fall BIOL0430 S01 16966 TTh 9:00-10:20(08) (E. Edwards)

0440 Plant Organism
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. Discusses the significance of various plant model systems for genetic research and understanding of mechanisms controlling plant growth and development. Prerequisites: BIOL 0200 (or equivalent placement). Students MUST register for the lecture section and a lab. Students

Spr BIOL0440 S01 26709 TTh 10:30-11:50(09) (A. DeLong)

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

Fall BIOL0470 S01 11501 TTh 10:30-11:50(09) (M. McKeown)

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

Fall BIOL0480 S01 11493 MWF 9:00-9:50(02) (D. Rand)

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 disease, biotechnological application, and social context will be considered. Expected: BIOL 0200 (or equivalent placement).

Spr BIOL0500 S01 21090 MW 8:30-9:50(02) (P. Heywood)

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 applied biological cycles. Laboratory involves basic microbiological techniques and selection and manipulation of microbes and their genes. Expected: BIOL 0200 (or equivalent placement); CHEM 0330. Students MUST register for the lecture section and the lab. Enrollment limited to 72. Instructor permission required.

Spr BIOL0510 S01 21111 MW 1:00-2:20(06) (R. Bennett)

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: BIOL 0200 (or equivalent placement).

Sum BIOL0530 S01 60269 MW 1:30-5:30 (R. Bungiro)
Fall BIOL0530 S01 11534 TTh 2:30-3:50(11) (R. Bungiro)

0800 Principles of Physiology
Introduction to the function and integration of animal systems with an emphasis on mammals. Includes basic concepts in cell and organ system physiology as well as fundamentals of modern trends in physiological science. Emphasizes the constraints of physical and chemical principles to animal function at both the cellular and systemic levels. Expected: BIOL 0200 (or equivalent placement).

In the fall term, BIOL 0800 has a limited enrollment of 200 students. Only seniors and juniors will be allowed to register for the course during the registration period, but there should be some openings left for sophomores. If you are going to be a sophomore in the fall and you want to try to get into this course you must go to the Physiology Department on the third floor of the BioMed Center on April 23rd at 10:00 a.m. and put your name on the waitlist. It is expected that a number of sophomores will be allowed into the class but final decisions on sophomore enrollment will not be made until after the third class in September. The first students to sign up on the waitlist will be the first sophomores allowed in the class. University limited enrollment policy will apply for the first three classes in September.

If you have any further questions regarding this policy please contact Andrea_Jeanne_Sobieraj@brown.edu; 863-2263. Students MUST register for a lab, and a lecture section.

Sum BIOL0800 S01 60270 MWF 1:00-3:40 (A. Sobieraj)
Fall BIOL0800 S01 13163 TTh 10:30-11:50(09) (D. Jackson)
Spr BIOL0800 S01 21822 MWF 10:00-10:50(03) (C. Hai)

0860 Diet and Chronic Disease
This course addresses the relationship of food to the development and treatment of chronic diseases. Chronic diseases discussed are obesity, dyslipidemia/heart disease, diabetes mellitus, cancers and osteoporosis. Dietary recommendations for these diseases are critically assessed. Geared toward students interested in nutrition,
medicine, and public health. Prerequisites: BIOL 0030 and 0800, plus permission of the instructor. Enrollment limited to 20.

Spr BIOL0860 S01 21128 TTh 3:00-5:20(11) (M. Flynn)

0950 Topics in Science Communications
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 0950 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.

May be taken twice for credit. Not for concentration credit in the biological sciences programs. Written permission must be obtained from Dean M. Thompson prior to registering. Section numbers vary by instructor. Instructor's permission required.
Fall; Spr

(For Undergraduates and Graduates)

1050 Biology of the Eukaryotic Cell
Examines organelles and macromolecular complexes of eukaryotic cells with respect to structural and functional roles in major cellular activities. Emphasizes experimental basis for knowledge in modern cell biology using original literature, and discusses validity of current concepts. For advanced undergraduates and beginning graduate students. Complementary to BIOL 1270 and 1540. Prerequisites: BIOL 0280, 0470, 0500, or instructor permission. Graduate students register as a BIOL 0520 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.

May be taken twice for credit. Not for concentration credit in the biological sciences programs. Written permission must be obtained from Dean M. Thompson prior to registering. Section numbers vary by instructor. Instructor's permission required.
Fall; Spr

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 biodegradable 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.

Fall BIOL1090 S01 11565 TTh 2:30-3:50(11) (E. Mathiowitz)

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. Enrollment limited to 30.

Spr BIOL1100 S01 23570 W 3:00-5:20(14) (A. Zimmerman)

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 15869 W 3:00-5:20(14) (E. Oancea)

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 23700 TTh 4:00-5:50(16) (B. Zielinski)

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 0350, plus BIOL 0500 or 0800. Enrollment limited to 20. Instructor permission required.

Spr BIOL1140 S01 21155 M 3:00-5:20(13) (D. Hoffman-Kim)

1150 Stem Cell Engineering
Stem cell engineering focuses on using adult, embryonic, and induced stem cells to repair damaged or diseased tissues. This course will examine the role of stem cells in development, tissue homeostasis, and wound healing, as well as how they are being applied in regenerative medicine. The course will use a lecture and discussion format for major topic areas. Additionally, students will receive hands-on training in how to isolate, culture, and differentiate adult stem cells in a laboratory setting. Expected: CHEM 0350 and BIOL 0500 or an equivalent course in cell biology or physiology. Enrollment limited to 20. Instructor permission required. Students MUST register for a lab, and a lecture section.

Fall BIOL1150 S01 17044 Th 4:00-6:20(13) (E. Darling)

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, metabolism, energy sources, cardiovascular and respiratory effects, thermoregulation, and special topics (e.g., exercising at high altitude). Student presentations based on scientific articles are included. Expected: BIOL 0800 or written permission of the instructor.

Fall BIOL1160 S01 11567 MWF 1:00-1:50(06) (C. Hai)

1190 Synaptic Transmission and Plasticity
Synapses are the means by which the nervous system communicates. In this seminar-style course, we will explore the molecular and physiological underpinnings of synaptic transmission. We will then examine ways in which synapses can modulate their strength during development, learning, and other adaptive processes. Expected: BIOL 0800 or NEUR 1020. Enrollment limited to 20. Instructor's permission required. WRIT

Fall BIOL1190 S01 11569 TTh 1:00-2:20(10) (J. Kauer)

1200 Protein Biophysics and Structure
Structural Biology is the science to determine three-dimensional structures of biomacromolecules, e.g., proteins, RNA and DNA. These structures enable biologists to understand and explore their function. Since proteins, RNA and DNA are the primary molecules of life, structural biology enables us to understand and influence these molecular machineries which form the basis of all biological process. Expected: BIOL 0280.

Spr BIOL1200 S01 21260 “To Be Arranged” (W. Peti)
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1260 Physiological Pharmacology
Covers the physiology of human disease (e.g., Heart failure and arrhythmia; cancer signaling pathways with a focus on breast cancer; neurological disorders such as schizophrenia and Parkinson's disease) and discusses the pharmacology of the drugs used to treat disease. A group of the most commonly prescribed drugs is discussed in terms of their fundamental modes of action and clinical importance. Expected: BIOL 0800.

Fall BIOL1260 S01 11571 TTh 10:30-11:50(09) (J. Marshall)

1270 Advanced Biochemistry
An advanced course in biochemistry, biochemical methods, and reading of the primary literature, featuring systematic coverage of the biochemistry of the central dogma, including DNA (replication, repair, recombination); RNA (regulation and mechanism of transcription, processing, turnover), and proteins structure, synthesis, modification, degradation, mechanisms of action, function). Lectures complemented by review sessions and laboratory exercises. Expected: BIOL 0280, CHEM 0350, 0360. Graduate students register for BIOL 2270. Students MUST register for the lecture section and a lab.

Fall BIOL1270 S01 11576 TTh 2:30-3:50(11) (A. Brodsky)

1290 Cancer Biology
Provides a conceptual understanding of molecular events underlying development of human cancer. Focused on genetic changes leading to malignant transformation of cells. Covers cell cycle control, DNA damage, mutagenesis, cancer predisposition syndromes, oncogenic viruses, tumor immunology, metastasis, cancer chemotherapy and drug resistance. Lecture plus discussion of primary literature. Expected: BIOL 0280, 0470; and 0500, or 1050.

Fall BIOL1290 S01 16967 MW 3:00-5:20(13) (A. Zhitkovich)

1310 Analysis of Development
Explores mechanisms underlying development. Topics: gamete interactions, establishment of body plans, cell signaling and tissue interactions, morphogenetic pattern formation, developmental regulation of gene expression, molecular control of tissue specification and diversification, and the evolutionary comparison of developmental processes. Primary literature will be discussed in sections. Laboratory, involves work with live embryos. Expected: BIOL 0200 (or equivalent), and one additional course in the area of genetics, embryology, cell biology, molecular biology. Graduate students register for BIOL 2310. Students MUST register for the lecture section and the lab. Expected: BIOL 0200; plus at least one of the following: BIOL 0280, 0310, 0320, 0470, 0500, 1050. Enrollment limited to 36. Instructor permission required.

Spr BIOL1310 S01 21157 TTh 9:00-10:20(08) (K. Wharton)

1420 Experimental Design in Ecology
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. Instructor's permission required. Enrollment Limited to 20.

Fall BIOL1420 S01 15995 W 3:00-5:20(14) (J. Witman)

1430 The Computational Theory of Molecular Evolution
This course employs intellectual traditions from computer science and biology to investigate the properties and principles of DNA sequence evolution. The roles of mutation, natural selection, population size and subdivision, and genetic recombination are explored. Lectures complemented by web-based computer exercises. Expected: either an introduction to evolution (BIOL 0200, 0480) or to computer science (CSCI 0150, 0160, 0170).

Spr BIOL1430 S01 26711 MWF 10:00-10:50(03) (D. Weinreich)

1440 Marine Biology
An examination of current topics in the ecology of marine organisms and communities. Current literature and ideas are analyzed in a seminar format (5hr/week). A class research project provides hands-on experience with designing and interpreting experimental field work. Prerequisites: BIOL 0410 and 0420. Instructor's permission required. Enrollment limited to 15.

Spr BIOL1440 S01 26713 "To Be Arranged" (M. Bertness)

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

Fall BIOL1470 S01 13634 TTh 9:00-10:20(08) (D. Sax)

1475 Biogeography
Will provide an overview of the field of biogeography—the study of geography of living organisms. Class meetings will be split between lectures and discussions. Each discussion will expose students to foundational papers, which set the context for the field's development, and more recent papers, which show where the field is headed. Each student will conduct a short (but time consuming) original research project on some topic in biogeography. A mandatory weekend-long field trip is required. Prerequisites: BIOL 0420 and 0480. Expected: one taxonomy-based course (e.g., BIOL 0410, 0430, or 0460). Enrollment limited to 15 juniors, seniors, and graduate students. Instructor permission required.

Spr BIOL1475 S01 25923 TTh 1:00-2:20(10) (D. Sax)

1520 Innate Immunity
Innate immunity is the initial response to microbes that prevents infection of the host. It acts within minutes to hours, allowing the development of the adaptive response in vertebrates. It is the sole mechanism of defense in invertebrates such as insects. The components and mechanisms dictating this response are explored. Prerequisite: BIOL 0530. Instructor permission required.

Fall BIOL1520 S01 11580 MW 8:30-9:50(02) (L. Brossay)

1540 Molecular Genetics
 Covers advanced genetic and molecular methods and their use in analysis of complex biological phenomena such as development, signaling, behavior, and disease. Discusses how these techniques are applied across an array of organisms, with special emphasis on the major eukaryotic genetic model systems (Drosophila, nematodes, mouse, yeast, Arabidopsis). Uses primary research literature to analyze the design of forward- and reverse--genetic approaches to discover novel gene function. For advanced undergraduates and beginning graduate students. Prerequisite for undergraduates: BIOL 0470 or instructor permission. Expected background: any of BIOL 0280, 0500, 1050, or 1310. Graduate students should register for BIOL 2540.

Spr BIOL1540 S01 21164 TTh 1:00-2:20(10) (J. Bender)

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. Prerequisites: BIOL 0470 or BIOL 0530, or instructor permission.

**Spr BIOL1550 S01 21165 MWF 1:00-1:50(06) (R. Bungiro)**

**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.

**Spr BIOL1560 S01 21166 MWF 10:00-10:50(03) (P. Shank)**

**1600 Development of Vaccines to Infectious Diseases**

Provides background on steps involved in vaccine development, from conceptualization to production to immunization. Considers infectious diseases and their associated vaccines in the context of community health. Appropriate for any student wanting to gain an understanding of vaccine science, and also provides a foundation for other advanced courses in immunology and infectious disease, biomedical research, or medical/graduate studies. Activities include an in–class presentation and a research paper on a topic chosen by the student. Expected: BIOL 0530 (or equivalent experience, to be vetted with instructor). Instructor’s permission required.

**Spr BIOL1600 S01 21167 MW 3:00-4:20(14) (R. Bungiro)**

**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 toxicants 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 or BIOL 0800. Advanced students have priority.

**Spr BIOL1820 S01 21169 TTH 2:30-3:50(11) (M. Hixon)**

**1870 Techniques in Pathobiology**

A methodology course featuring laboratory and lecture instruction in established and leading-edge technologies. Examples: flow cytometry (multi-parameter analysis, cell sorting, DNA analysis, apoptosis analysis); molecular biology (PCR, in situ hybridization, southern blotting, cytogenetics, gene cloning, bioinformatics); digital imaging (image acquisition, processing and analysis); light microscopy (confocal, immuno-histochemistry); transmission electron microscopy (immuno/lectin/enzyme cytochemistry); scanning electron microscopy (including x-ray microanalysis). Instructor’s permission required. Enrollment limited to 16.

**Spr BIOL1870 S01 21170 TTH 1:00-3:50(10) (C. Jackson)**

**1880 Comparative Biology of the Vertebrates**

The biology, structure, and evolutionary history of the vertebrates considered phylogenetically, emphasizing evolution of the major body systems. Stressess an evolutionary approach to the correlation of structure and function with environment and mode of life. Labs include dissection of several different vertebrates, comparative osteological material, and a museum trip. Recommended: BIOL 0320 or 0800. Freshmen must obtain instructor permission to register. Students MUST register for the lecture section and the lab. Enrollment limited to 64.

**Spr BIOL1880 S01 22410 MWF 11:00-11:50(04) (C. Janis)**

**1920 Topics in Social Studies of Biology**

For related science credit in Biology programs; track credit or capstone in Human Biology. Enrollment limited to 20 juniors and seniors.

**1920B Health Inequality in Historical Perspective**

This seminar course takes a historical perspective to explore the fundamental causes of health inequality in the US. We will draw on a series of case studies from the 19th century to the present to examine the socio–political and economic context of health and diseases, focusing specifically on how race, class, and gender shape the experience of health, notions of disease causality, and public health responses. Topics include the health consequences of immigration, incarceration, race-based medicine, the Chicago heat wave, and Katrina. BIOL 0200 and previous course work in Africana Studies and/or Science and Technology Studies preferred. Enrollment is restricted to second and third year students and is limited to 20 students. Written permission required. An application for entry will be distributed on the first day of class. Not for concentration credit as a biology course.

**Fall BIOL1920B S01 15868 W 3:00-5:20(14) (L. Braun)**

**1920C Social Contexts of Disease**

What shapes our understandings of disease? What makes a disease real? How might we explain the demise of formerly prevalent diseases (e.g. neurasthenia) and the arrival of others (e.g., fibromyalgia)? How do politics, technologies, and institutions like hospitals affect conceptions of disease and structure their treatment? We will examine the impact of social context on patients’ experiences of disease, as well as clinical, scientific, and public health approaches to disease. We will also consider disease in relation to important social relations such as the doctor-patient relationship, the power of the state to monitor and regulate disease, disparities in the burden of disease, and the cultural care of the body. Enrollment limited to 20 juniors and seniors, required instructor permission; AB Human Biology seniors intending this as capstone will have first priority; others by permission.

**Fall BIOL1920C S01 16045 M 1:00-3:30(06) (D. Weinstein)**

**1920D Race, Difference and Biomedical Research: Historical Considerations**

Exploration of the historical context of the current debate over racial categorization in biomedical research. Taking an interdisciplinary case-study approach, we will address the question: How have the theories and practices of science and technology produced knowledge of “race” and racial difference? How does the process of producing “race” relate to other hierarchies of difference, such as gender and class? What are the terms of contestation? Previous course work in biomedical science, history of science, science and technology studies, and/or Africana Studies preferred. Enrollment limited to 20 juniors and seniors. Instructor permission required.

**Spr BIOL1920D S01 26829 Th 4:00-6:20(16) (L. Braun)**

**1940 Special Topics**

**1941A Plants in a Changing Planet**

Plants are the foundation of Earth’s ecosystems and essential to human survival and civilization. This seminar will examine the physiological, ecological, and evolutionary responses of plants to rapid environmental change, and the consequences for agriculture and the structure and function of natural systems. Expected background: at least one of the following courses - BIOL 0420, 0430, 0440, 0480, or ENVS 0490.

**Spr BIOL1941A S01 26714 TTh 9:00-10:20(08) (J. Schmitt)**

**1941C Biology of Reproduction**

This course investigates the cellular, molecular, evolutionary and developmental mechanisms of how organisms sexually reproduce. Diverse organisms and their reproductive mechanisms will be examined, including humans, mice, sea urchins, flies and roundworms, flowering plants and algae. Lectures will be complemented by special topic presentations by the students, relying on the primary literature in this field. Prerequisites: a course in Cell Biology e.g. BIOL 0500 or BIOL 1050, and two additional Biology courses above the introductory (BIOL 0200) level. Instructor’s permission required.

**Spr BIOL1941C S01 26715 "To Be Arranged" (G. Wessel)**

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
32 / Biology and Medicine

1950 Directed Research/Independent Study
Directed research projects supervised by individual faculty members in the Division of Biology and Medicine. Required for Sc.B. programs in Biology, Biophysics, Marine Biology, Applied Math-Biology, Biochemistry and Molecular Biology, Bioengineering, Computational Biology, and Human Biology; optional for others. Opportunities are available in both campus and hospital-based settings. Projects can serve as basis for Honors theses. Information on specific opportunities and faculty research areas are found in a research database at bms.brown.edu/bug/pages/research.html. The site also offers a student manual, proposal forms, budget request forms, and information about Honors. Individual consultations can be scheduled with Dean Thompson. Required: A completed proposal form, sponsor's and concentration advisor's approval, and written permission and override from Dean M. Thompson (following review of proposal) prior to registering for any section of this course. Instructor's permission required.

Fall

1960 Directed Research/Independent Study
Please see description for BIOL 1950. Instructor's permission required.
(Primarily for Graduates)

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.

Fall BIOL2010 S01 11610 MW 3:30-4:20(13) (J. Sedivy)

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, the mechanism 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 events (signaling, organelle biogenesis and inheritance, and cell cycle control) will be presented. Discussion sections complement lectures.

Fall BIOL2030 S01 11609 MTThF 9:30-10:50(03) (J. Laney)

2050 Biology of the Eukaryotic Cell
(Undergraduate students should register for BIOL 1050.) Students MUST register for a conference, and a lecture section.

Fall BIOL2050 S01 11611 TTh 1:00-2:20(10) (K. Miller)

2060 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 BIOL2060 S01 25734 M 3:00-5:20(13) (R. Creton)

2110 Drug and Gene Delivery
Topics in drug delivery systems including history of the field, advantages of controlled release technology, stabilization and release of proteins, fabrication methods, regulatory considerations, economic aspects, patents and intellectual property rights, and more. Prepares students for research in industry and academia, and offers information for consultants in the field. Expected: BIOL 1090, 1120; CHEM 0350, 0360.

Fall BIOL2110 S01 11616 M 3:00-5:20(13) (E. Mathiowitz)

2130 Techniques in Molecular and Cell Science
This course provides hands-on laboratory training in state-of-the-art techniques in molecular and cellular sciences, and reinforces this training with didactic lectures that stress key principles, the quantitative approach and the most exciting applications of these technologies in the context of current research. Areas covered include cell culture, tissue engineering, DNA cloning, gene therapy, quantitative assays, microscopy and image analysis.

Enrollment is limited to 12; written permission required. Permission will be granted after the first class. Students MUST register for the lecture section and a lab.

Fall BIOL2130 S01 15894 To Be Arranged (J. Morgan)

2140 Principles in Experimental Surgery
An introduction to the principles and practice of surgery, sterile technique, anesthesia, and laboratory animal care. Intended to provide highly supervised, hands-on experience in techniques for humane handling and surgical management of experimental animal subjects. Emphasizes surgical technique, anesthesia technique, and laboratory animal medicine. Primarily for graduate students. Limited to 5. Students MUST register for the lecture section and the lab.

Prerequisite: BIOL 0800 and instructor's permission.

Spr BIOL2140 S01 21228 T 4:00-6:20(16) (J. Harper)

2150 Scientific Communication
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 14407 W 1:00-3:50(06) (T. Serio)
Fall BIOL2150 S02 17026 To Be Arranged (R. Page)

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. Instructor's permission required.

Fall BIOL2170 S01 11617 MW 12:30-1:50(06) (A. Zimmermann)

2200 Current Topics in Biochemistry
Enrollment limited to 20 graduate students.

2200C Current Topics in Biochemistry: The RNA World
A critical evaluation of contemporary research in biochemistry, molecular biology, and structural biology. Intensive reading and discussion of the current literature, critical analysis, and student presentations in seminars. Advanced undergraduates with permission.

Spr BIOL2200C S01 26780 To Be Arranged (W. Fairbrother)

2200D Current Topics in Biochemistry: Transcription
A critical evaluation of current research in biochemistry and molecular biology focusing on the mechanism and regulation of transcription. Intensive reading, critical analysis, and discussion of the relevant literature in the context of student presentations in seminars. Advanced undergraduates with permission of the instructor. Enrollment limited 20 students. Instructor permission required.

Fall BIOL2200D S01 17203 To Be Arranged (G. Jogl)
Fall BIOL2210A S01 15891 ‘To Be Arranged’ (A. Landy)

2210A Molecular Mechanisms in Site–Specific Recombination and DNA Transposition
Enrollment limited to 20. Instructor’s permission required.

Fall BIOL2210C S01 17029 ‘To Be Arranged’ (S. Gerbi)

2210C Current Topics in Molecular Biology: Cellular Quality Control Mechanisms
Protein synthesis is a fundamental cellular process that is dependent upon the rapid and accurate synthesis of ten to twenty thousand ribosomes per generation to carry out the equally rapid and accurate synthesis of protein. Progress in understanding Ribosome structure and function, Ribosome evolution, Ribosome biogenesis and coordination of cell growth with cell division will be explored using the current literature with weekly student seminars and a final research proposal. Enrollment limited to 20.

Fall BIOL2230 S01 169669 ‘To Be Arranged’ (E. Morrow)

2320D The Biology of Aging
Studying the mechanisms underlying the process of aging promises to be one of the next great frontiers in biomedical science. Understanding the biology of aging is important not only for the long-term possibility of increasing life span, but for the more immediate benefits it will have on age-related diseases. As demographics of industrialized countries have changed, age-related diseases such as cancer, cardiovascular disease, stroke, osteoporosis, arthritis and Alzheimer’s disease have assumed epidemic proportions. A thorough understanding of the aging process is an important pre-requisite for designing rational therapeutic interventions for the treatment of these age-related disorders. We will focus on examining the biology of aging primarily through the examination of studies of a molecular, cellular, genetic and demographic nature. Lectures and presentations are based on reading of the primary and secondary literature. Advanced undergraduates with permission of the instructor. Enrollment limited to 20.

Fall BIOL2220C S01 11624 ‘To Be Arranged’

2220 Artificial Organs/Biomaterials/Tissue Engineering Seminar
Required of all first- and second-year graduate students in the Artificial Organs/Biomaterials/Cellular Technology graduate program, and open to others. Concepts of drug delivery and tissue engineering, implantation biology, and cellular therapy, as well as the research projects directed by program faculty. Students present research seminars and participate in presentations by outside speakers. Includes Journal Club activities. Instructor’s permission required. Enrollment limited to 20.

Fall BIOL2240 S01 21392 ‘To Be Arranged’

2240 Artificial Organs/Biomaterials/Tissue Engineering Seminar
See Artificial Organs/Biomaterials/Tissue Engineering Seminar (BIOL 2230) for course description. Enrollment limited to 20.

Fall BIOL2270 S01 16367 TTh 2:30-3:50(11) (A. Brodsky)

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

Spring BIOL2310 S01 21250 TTh 9:00-10:20(08) (K. Wharton)

2310 Analysis of Development
(Undergraduate students should register for BIOL 1310.) Students MUST register for a lab, and a lecture section. Instructor’s permission required. Enrollment limited to 36.

Spring BIOL2320A S01 19696 ‘To Be Arranged’ (L. Gerbi)

2320A Neurogenetics and Disease
We will explore mechanisms underlying how neuronal cell fates are established during development and how the understanding of this process may provide insight into neurological disease and therapeutic intervention. Topics: Temporal identity in neuroblast and cerebral cortex cell fate specification, transcriptional control of lineage decisions in the spinal cord, the role of morphogen concentration and timing on cell fate decisions, micro RNA control of gene regulation, epigenetics, induced pluripotent stem cells, stem cell use in therapeutic approaches to intervene in neurological diseases. Primary literature will be discussed in lectures in the format of student-led, faculty-guided discussions. Enrollment limited to 20. Instructor’s permission required.

Fall BIOL2270 S01 16367 TTh 2:30-3:50(11) (A. Brodsky)

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

Fall BIOL2290D S01 16968 ‘To Be Arranged’ (M. Johnson)

2290D Small RNA Regulation of Germ Cells and Development
Enrollment limited to 20. Instructor’s permission required.

Spring BIOL2430 S01 16968 ‘To Be Arranged’ (M. Johnson)

2430 Topics in Ecology and Evolutionary Biology
Critical evaluation of research in genetics and genomics, and related topics in a seminar/discussion format. Topics vary each semester. Expected: Strong background in genetics, e.g. both BIOL 0470 Genetics and BIOL 1540 Molecular Genetics, or equivalent. For graduate students; undergraduates with permission of the instructor. Enrollment limited to 20.

Fall BIOL2440 S01 16368 TTh 2:30-3:50(11) (A. Brodsky)

2440 Topics in Cell Biology
Topics vary from semester to semester, with sections offered each semester. Enrollment limited to 20.

Fall BIOL2440 S01 16368 TTh 2:30-3:50(11) (A. Brodsky)

2440 Topics in Cell Biology
Topics vary from semester to semester, with sections offered each semester. Enrollment limited to 20.

Spring BIOL2440 S01 21250 TTh 9:00-10:20(08) (K. Wharton)

2540 Molecular Genetics
(Undergraduate students should register for BIOL 1310.) Students MUST register for a lab, and a lecture section. Instructor’s permission required. Enrollment limited to 36.

Spring BIOL2540 S01 21250 TTh 9:00-10:20(08) (K. Wharton)

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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
2640B Microbial Pathogenesis
Examines microbial pathogens and the underlying mechanisms by which infectious organisms cause diseases. Bacterial, fungal, protozoal and viral pathogens will be studied using tools of modern biology. Also examined are the host's immune responses to infection and disease. Areas covered include mechanisms of pathogen internationalization and survival, immune responses, signal transduction and pathophysiology. Expected: BIOL 0810, 0530, or 1550.

Fall BIOL2640B S01 16970 ‘To Be Arranged’ (A. Campbell)

2860 Molecular Mechanisms of Disease
Examines research and modern techniques, emphasizing infectious disease and environmental exposures correlating histopathology with molecular pathogenesis: cell injury, inflammation, thrombosis and vascular disease, cancer, and toxicology. Based on BIOL 1860 lectures plus discussion section. Expected: BIOL 1290, 2050 (other 1000-level biology course with approval). Textbook plus primary lecture. Required for Pathobiology graduate students, written permission for other graduate or M.P.H. students.

Fall BIOL2860 S01 13331 ‘To Be Arranged’ (C. Marsit)

2940 Special Topics
Topics vary each year.

2940A Molecular Pharmacology and Physiology Seminar
Professional development seminar required of all students in the Molecular Pharmacology and Physiology graduate program, and open to others. Instruction in effective oral presentation skills, and current topics in molecular pharmacology and physiology, including research projects directed by program faculty, statistical methods of data analysis, techniques for assessing gene function, and an overview of research at Brown and available research funding sources. Students present and participate in research seminars or planned research. Instructor permission required for undergraduates.

Spr BIOL2940A S01 23849 W 9:30-10:50(03) (C. Zimmerman)

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 11643 ‘To Be Arranged’
Spr BIOL2970 S01 21257 ‘To Be Arranged’

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. Instructor’s permission required.

Fall; Spr

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

Fall BIOL2990 S01 11645 ‘To Be Arranged’
Spr BIOL2990 S01 21259 ‘To Be Arranged’

Fall XLIST Courses of Interest to Biology Concentrators
The following courses may be taken for concentration credit. Please see the sponsoring department for the time and location of each course.

Environmental Studies
ENVS 0455 Coastal Ecology and Conservation
ENVS 0490 Environmental Science in a Changing World

(For Medical Students Only)

3001 Clerkship in Medicine
Twelve weeks.

Fall BIOL3001 S01 14816 ‘To Be Arranged’
Fall BIOL3001 S02 15017 ‘To Be Arranged’
Spr BIOL3001 S03 24939 ‘To Be Arranged’

3010 Systemic Pathology
First-semester systemic pathology course building on the general principles of disease introduced in general pathology IMS-1. Objectives include learning the classification of systemic disease according to basic pathological mechanisms, describing and explaining the functional and structural changes produced by the most common diseases, and enhancing the ability to diagnose and treat patients. Runs in parallel with pathophysiology BIOL 3500; covers four organ system segments: cardiovascular, renal, and pulmonary and supporting structures.

Fall BIOL3010 S01 11853 ‘To Be Arranged’

3640 Doctoring I

Fall BIOL3640 S01 13760 ‘To Be Arranged’ (A. Frazzano)

3642 Integrated Medical Sciences I - Scientific Foundations of Medicine

Fall BIOL3642 S01 13762 ‘To Be Arranged’

3643 Integrated Medical Sciences I - Histology

Fall BIOL3643 S01 13763 ‘To Be Arranged’ (M. Thompson)

3644 Integrated Medical Sciences I - Human Anatomy

Fall BIOL3644 S01 13764 ‘To Be Arranged’ (D. Ritter)
Fall BIOL3644 S02 16432 ‘To Be Arranged’ (D. Ritter)

3645 Integrated Medical Sciences I - General Pathology

Fall BIOL3645 S01 13765 ‘To Be Arranged’ (L. Dumenco)

3650 Doctoring II

Spr BIOL3650 S01 23686 ‘To Be Arranged’

3652 Integrated Medical Sciences II - Brain Sciences

Spr BIOL3652 S01 23688 ‘To Be Arranged’

3653 Integrated Medical Sciences II - Microbiology/Infectious Diseases and Epidemiology

Spr BIOL3653 S01 23689 ‘To Be Arranged’

3654 Integrated Medical Sciences II - Endocrine Sciences

Spr BIOL3654 S01 23690 ‘To Be Arranged’

3660 Doctoring III

Fall BIOL3660 S01 13766 ‘To Be Arranged’ (A. Frazzano)

3662 Integrated Medical Sciences III - Cardiovascular

Fall BIOL3662 S01 13768 ‘To Be Arranged’ (D. Burtt)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkssearch_public.P_Main).
3663 Integrated Medical Sciences III - Pulmonary  
Fall  BIOL3663  S01  13769  'To Be Arranged'  (B. Kimble)

3664 Integrated Medical Sciences III - Renal  
Fall  BIOL3664  S01  13770  'To Be Arranged'  (S. Hu)

3665 Integrated Medical Sciences III - Supporting Structures  
Spr  BIOL3665  S01  25930  'To Be Arranged'  (N. Jellinek)

3666 Integrated Medical Sciences III - Systemic Pathology  
Fall  BIOL3666  S01  13772  'To Be Arranged'  (C. Oyer)

3667 Integrated Medical Sciences III - System-Based Pharmacology  
Fall  BIOL3667  S01  13773  'To Be Arranged'  (R. Patrick)

3670 Doctoring IV  
Spr  BIOL3670  S01  23691  'To Be Arranged'

3671 Integrated Medical Sciences IV - Comprehensive  
Spr  BIOL3671  S01  23692  'To Be Arranged'

3672 Integrated Medical Sciences IV - Hematology  
Spr  BIOL3672  S01  23693  'To Be Arranged'

3673 Integrated Medical Sciences IV - Gastroenterology  
Spr  BIOL3673  S01  23694  'To Be Arranged'

3674 Integrated Medical Sciences IV - Human Reproduction, Growth and Development  
Fall  BIOL3674  S01  16101  'To Be Arranged'

3675 Integrated Medical Sciences IV - Systemic Pathology  
Spr  BIOL3675  S01  23696  'To Be Arranged'

3676 Integrated Medical Sciences IV - System-Based Pharmacology  
Spr  BIOL3676  S01  23697  'To Be Arranged'

3691 System-Based Pharmacology  
Spr  BIOL3691  S01  23100  'To Be Arranged'

3900 Clerkship in Surgery  
Eight weeks.
Fall  BIOL3900  S01  14778  'To Be Arranged'
Fall  BIOL3900  S02  14916  'To Be Arranged'
Spr  BIOL3900  S03  24943  'To Be Arranged'

4500 Pediatrics Clerkship  
Six weeks.
Fall  BIOL4500  S01  14783  'To Be Arranged'
Fall  BIOL4500  S02  14987  'To Be Arranged'
Spr  BIOL4500  S03  24944  'To Be Arranged'

4900 Obstetrics and Gynecology Clerkship  
Six weeks.
Fall  BIOL4900  S01  14787  'To Be Arranged'
Fall  BIOL4900  S02  14992  'To Be Arranged'

5100 Clerkship in Psychiatry  
Six weeks.
Fall  BIOL5100  S01  14790  'To Be Arranged'
Fall  BIOL5100  S02  14994  'To Be Arranged'
Spr  BIOL5100  S03  24946  'To Be Arranged'

5400 Clerkship in Community Health  
Six weeks.
Fall  BIOL5400  S01  14793  'To Be Arranged'
Fall  BIOL5400  S02  14995  'To Be Arranged'

5800 Clerkship in Family Medicine  
Six weeks.
Fall  BIOL5800  S01  14797  'To Be Arranged'
Fall  BIOL5800  S02  14999  'To Be Arranged'
Spr  BIOL5800  S03  24947  'To Be Arranged'

BioMed-Community Health
(Primarily for Undergraduates)

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. FYS
Spr  PHP0030  S01  21746  TTh 6:30-7:50(12)  (T. Empkie)

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. LILE
Spr  PHP0310  S01  22414  MWF 11:00-11:50(04)  (I. Wilson)

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. Enrollment limited to 100 undergraduates. LILE
Fall  PHP0320  S01  12645  MWF 11:00-11:50(04)  (M. Clark)

(For Undergraduates and Graduates)

1010 Doctors and Patients- Clinical Communication in Medicine  
Communication is central to medical practice and interpersonal relationships between patients and physicians can often be powerful curative agents. This course reviews theory and research on physician-patient communication. In addition to lectures, readings, and discussions, students will have opportunities to observe physicians in clinical settings. Related topics areas include communication sciences, health psychology, health education, and medical anthropology. Enrollment limited to 20.
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. Guest lecturers cover different diseases and public health perspectives. Enrollment limited to 70.

Special application form available at the International Health Institute website: bms.brown.edu/ihi/

No students will be pre-registered for PHP 1070 before the first day of class. The instructor will decide which students will be permitted to register after the first day of class. The decision will be based on the replies on the permission form and its date of submission. The required permission form must be submitted by noon of the first day of class, and should be submitted via campus mail: International Health Institute, Box G-S121, or dropped off at the office of the Dept of Community Health, 2nd floor of 121 South Main St. DVPS LILE WRIT

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. Enrollment limited to 30. Instructor’s permission required.

Fall PHP1070 S01 12646 MW 8:30-9:50(02) (S. McGarvey)

1320 Survey Research in Health Care
An introduction to the methodology of survey research as it is conducted by social scientists and epidemiologists. Provides an overview of all aspects of study design and instrument development as well as an introduction to statistical analysis of survey data. Prerequisite: PHP 0320. Students should fulfill the department’s statistics requirement prior to taking, or concurrently with, this course.

Fall PHP1320 S01 12647 TTh 10:30-11:50(09) (S. Allen)

1520 Emergency Medical Systems: An Anatomy of Critical Performance
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 community health concentrators and PLME students pursuing MPH degree. Enrollment limited to 60.

Spr PHP1520 S01 22482 W 3:00-5:20(14) (B. Becker)

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 23500 M 3:00-5:20(13) (R. Marshall)

1680 Social and Community Medicine
A series of seminars on major current issues in public health and health care delivery.

Fall PHP1740 S01 13225 W 3:00-5:20(11) (W. Rakowski)

1680D Ethical Perspectives in Environmental Health
Introduction to ethical principles and concepts shaping emerging field of environmental ethics. Examines interfaces between policy, science, economic and social drivers attendant to ethical decision-making related to environmental issues. Environmental actions/decisions are used as case studies to identify, review and analyze ethical principles and approaches. Impact of national and international decisions are examined for their local impact. Enrollment limited to: 25. LILE

Spr PHP1680D S01 26442 ‘To Be Arranged’ (V. Wilson)

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, site visits, 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. DVPS LILE

Fall PHP1680I S01 13225 W 3:00-5:20(14) (B. Becker)

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. Instructor permission required.

Fall PHP1700 S01 13337 M 1:00-3:20(06) (K. Kelsey)

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 12678 TTh 2:30-3:50(11) (W. Rakowski)

1910 Community Health Senior Seminar: Health and Human Rights
Violations of human rights are particularly relevant to population health. Discrimination and stigmatization, health policies, civil and international conflicts, and practices in biomedical and behavioral research contribute to population patterns of disease, injury, and disability. Principles of human rights and their application to current crises are the basis for seminar discussion. Prerequisite: PHP 0310, 0320, and 1320. Open to Senior Community Health concentrators only.

Fall PHP1910 S01 12684 M 3:00-5:20(13) (O. Galarraga)

1920 Social Determinants of Health
The course provides an overview of social determinants of health. Examples of topics include health effects of educational attainment, social integration, neighborhood socioeconomic characteristics, racial discrimination, gender, income inequality, childhood socioeconomic circumstances, parental neglect, and job strain. Mixed teaching methods are used, including small group discussions, problem-based learning and guest lectures. Open to graduate students and advanced undergraduates.

Spr PHP1920 S01 26443 F 1:00-3:20(06) (E. Loucks)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
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, and either PHP 2500 or 2510. Open to graduate students only.

Fall PHP2030 S01 14709 W 2:30-4:50(14) (I. Gareen)

2040 Applied Research Methods
Emphasizes the theory of sampling and survey methods and their application to public health research. Topics include: survey design and planning; principles of sampling and survey terminology; questionnaire construction; protection of human subjects; data collection (including interviewing and data coding procedures); and application, presentation, and evaluation of data. Suggested prerequisites: PHP 2120, and PHP 2500 or 2510. Open to graduate students only.

Spr PHP2040 S01 21748 M 5:30-8:30 PM(18) (M. Clark)

2060 Qualitative Methods in Health Research
Introduces qualitative approaches to data collection and analysis in health research. Methods covered include: participant observation, key-informant interviews, focus groups, innovative data collection strategies, and non-obtrusive measures. Students will use applied projects to develop skills in: qualitative data collection and management, interviewing, transcript analysis using computerized software, triangulation between qualitative and quantitative data, and report preparation for qualitative studies. Enroll ment limited to 20 graduate students.

Spr PHP2060 S01 21749 W 9:00-11:30(02) (T. Wetle)

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's permission required. S/NC

Spr PHP2070 S01 25392 'To Be Arranged' (P. Vivier)

2075 MPH Analytic Internship
The primary objective of this course is to gain hands-on experience in using data to address public health questions. Concepts from previous courses will be re-enforced as students work through the steps of addressing a public health question. Both data analysis and data interpretation will be emphasized in the context of a public health question. STATA 8.0 will be used to analyze data. Prerequisites: PHP 2120, and either PHP 2500 or 2510. Open to graduate students in the MPH program only.

Spr PHP2075 S01 21750 TTh 10:30-11:50(09) (A. Gjelsvik)

2080 Ethical and Legal Issues in Public Health
Uses case study strategies to: identify key ethical principles, values, legal authorities and regulation relevant to public health practice and research; evaluate public health research designs in terms of ethical and legal principles; conduct ethical analyses of public health interventions by identifying potential ethical and legal concerns and conflicts; and employ strategies for working effectively with special populations, including the design of culturally appropriate interventions. Open to graduate students only.

Fall PHP2080 S01 16196 Th 9:00-11:20(08) (L. Laliberte-Cote)

2090 Scientific Writing in Public Health
Addresses methodologic and operational issues associated with developing research studies in epidemiology (including clinical trials). Students prepare protocols for research studies in human populations with attention to ethical guidelines and regulations. Students critique completed proposals, are exposed to existing systems for submission and review of funding applications, as well as controversial issues such as conflict of interest. Prerequisite: PHP 2120. Enrollment limited to 10 graduate students. For Summer enrollment, students must be accepted to the Clinical and Translational Research Institute.

Sum PHP2090 S01 'To Be Arranged' (M. Stein)
Spr PHP2090 S01 25393 'To Be Arranged' (D. Savitz)

2120 Introduction to Methods in Epidemiologic Research
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 epidemiologic methods, students learn core principles of study design and data analysis through critiques of published epidemiologic studies as well as hands on practice through weekly exercises and assignments. Not open to first year students and sophomores.

Fall PHP2120 S01 12698 TTh 10:30-11:50(09)

2130 Human Biology for Epidemiology
This course provides basic principles of human biology and its applications to Epidemiology. 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 epidemiologic research. Mixed teaching methods are used, including small group discussions, problem-based learning and guest lectures. Prerequisite: PHP 2120 or instructor permission. Open to graduate students.

Fall PHP2130 S01 16691 T 1:00-3:20(10) (E. Loucks)

2180 Critical Epidemiology
This advanced graduate seminar is a critical history of epidemiologic concepts and methods, emphasizing 19th century to the present. Students build on teachings from PHP 2120 to understand and apply theoretical challenges of disease definitions and causal thinking. Weekly reading and writing assignments strengthen skills in awareness of belief systems and construction of facts within specific ideologic frameworks. Prerequisite: PHP 2120.

Spr PHP2180 S01 26446 'To Be Arranged'

2200 Intermediate Methods in Epidemiologic Research
Reinforces the concepts and methods taught in PHP 2120, with in-depth instruction in study design, confounding, model construction, measurement error, estimation, effect modification, and causal inference. Prerequisites: PHP 2120 and 2510. Co-requisite: PHP 2511. Open to graduate students only.

Spr PHP2200 S01 21751 TTh 2:30-3:50(11) (G. Wellenius)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
2220 Special Topics Series: Epidemiology Substantive Courses
The epidemiology of specific diseases or conditions—for example, reproductive epidemiology, infectious disease and cancer—either individually or in combination. Prerequisites for all sections: PHP 2120.

2220A Epidemiology of Violence and Its Consequences
Overview of the epidemiology of intentional injury within the social context. Selected topics include homicide, suicide, child abuse, intimate partner and family violence, sexual assault, elder mistreatment and officially sanctioned violence. Methodological challenges for epidemiologists, and the role of guns and substance use are examined. Prerequisite: PHP 2120 or knowledge of elementary epidemiologic methods. Enrollment limited to 10.

Spr PHP2220A S01 26447 ‘To Be Arranged’ (S. Buka)

2220B Nutritional Epidemiology
Americans as a population are fat and will be much sicker and costlier in the future because of this state. Obesity has truly reached epidemic status in the United States with over two thirds of Americans meeting the criteria for either overweight or obesity. This course will describe the weight status of the US population, as well as food, activity and other behaviors that are responsible for this health crisis and will explore the available data sources for weight and associated behaviors in the US. Additionally, policies, interventions and other strategies to improve the state of this problem will be explored. Supplemental assignments and possibly lectures directed towards doctoral students will provide additional coverage of methodological challenges and research procedures on these topics and the opportunity for limited individual study.

Fall PHP2220B S01 16692 ‘To Be Arranged’ (D. Michaud)

2220G Methodological and Practical Issues in Global Health Research
This seminar-style course will develop critical thinking and writing about global health research among graduate students interested in population health. Reading and writing assignments are on key conceptual, methodological and practical issues. It is interdisciplinary in nature but will reflect public health and epidemiologic perspectives on measures of population health, health disparities, interactions of effects on health, and implementation research. It is suitable for graduate students in the public health sciences, social sciences, public policy. Prior training in epidemiologic methods and global health, or their equivalents, are expected. Recommended prerequisite: PHP 2120. Open to graduate and medical students only.

Spr PHP2220G S01 26021 M 1:30-3:50(07) (S. McGarvey)

2320 Epidemiology of Infectious Diseases
From Black Death to Typhoid Mary to the more recent H1N1 pandemic, infectious disease epidemics have been recorded throughout written history. The top 5 infectious diseases cause more than 14 million deaths per year globally, accounting for roughly 25% of all deaths. This course will introduce students to the field of infectious disease epidemiology. Topics will include a history of infectious diseases, epidemiology and control of infectious diseases, analytic methods, study design, outbreak investigations, and statistical modeling. Prerequisite: PHP 2120. Instructor permission required. Enrollment limited to 15 graduate and medical students.

Spr PHP2320 S01 26448 M 3:00-5:20(13) (M. Lurie)

2330 Behavioral and Social Approaches to HIV Prevention
This course examines concepts, approaches, and empirical findings from behavioral and social research aiming to prevent HIV transmission. Students will become familiar with behavioral theories, social epidemiological principles, intervention design and measurement issues, and debates within the field of HIV prevention. A particular focus of this course is on the state of empirical research and the linkages between science and HIV prevention practice/policy. Students will conduct weekly readings, engage actively in seminar discussions, and participate in small-group presentations and research activities. Prior coursework in public health research methodology is recommended. Prerequisites: PHP 1740 and 2120. Enrollment limited to 25 graduate and medical students.

Spr PHP2330 S01 23836 ‘To Be Arranged’ (D. Operario)

2340 Behavioral and Social Science Theory for Health Promotion
This course will help students become familiar with behavioral and social science theories commonly used for planning disease prevention/health promotion interventions. In addition to review of specific theories, topics to be discussed include: how theories are developed and tested; challenges and potential pitfalls in using theory for intervention planning; and creation of causal diagrams based on concepts from theories. Undergraduates need permission of instructor; priority will be for Community Health concentrators. Enrollment limited to 25.

Spr PHP2340 S01 23837 Th 1:00-3:20(10) (D. Williams)

2360 Designing and Evaluating Public Health Interventions
Aims to develop skills in designing, implementing 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, implementing interventions, ethical considerations, process and impact/outcome evaluation, and instruction design. Students will critique intervention studies and gain experience in developing a hypothetical behavior change intervention. Graduate students and advanced undergraduate only.

Spr PHP2360 S01 21796 W 3:30-5:20(14) (K. Gans)

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. Instructor’s permission required. Enrollment limited to 20.

Fall PHP2370 S01 16693 F 1:00-3:20(06) (P. Monti)

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 Community Health may enroll with instructor’s permission. Enrollment limited to 20 graduate and medical students.
2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
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 freshmen or sophomores). Instructor permission required.

Fall PHP2400 S01 12724 MW 10:30-11:50(04) (V. Mor)

2430 Analysis of Population Based Datasets
Epidemiologic, health services, and social research often conducts "secondary analysis" of existing population-based datasets. Benefits include their representative sampling frames allowing generalizability to larger populations, timeliness, and lower cost. In addition, computer technology makes it possible to link some databases providing richer sources of information. There are several technical and methodological concerns when conducting "secondary analysis." Students will download, link, and analyze several data sets to understand the advantages of these data for health policy analysis as well as understand and apply different analytic methods. Familiarity with statistical analysis software is required. Prerequisites: PHP 2120, and either PHP 2500 or 2510. Open to graduate and medical students only.

Spr PHP2430 S01 23925 F 10:00-12:30(03) (E. Triche)

2440 Pharmacoepidemiology
This course provides an in-depth approach to methodologic issues encountered in pharmacoe and pharmacology principles pertinent to the design of pharmacoepi studies. A review of the drug development and approval process is provided, but the focus is on the use of observational pharmacoepidemiologic designs to: 1) document adverse reactions associated w/ drug use; 2) provide context for understanding risk management; 3) identify new uses for medications currently on the market; 4) evaluate the effectiveness of medications in populations excluded from clinical trials; and 5) inform public policy. Emphasis is on the identification of factors that influence the quality of pharmacoepidemiologic research, as well as studies designs and techniques to minimize such factors.

Fall PHP2440 S01 16694 "To Be Arranged"

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 14005 F 9:00-11:50(02) (A. Trivedi)

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. Instructor's permission required.

Sum PHP2470 S01 "To Be Arranged" (P. Vivier)

2500 Introduction to Biostatistics
The first in a two-course series designed for students who seek to develop skills in biostatistical reasoning and data analysis. Offers an introduction to basic concepts and methods of statistics as applied to diverse problems in the health sciences. Methods for exploring and presenting data; direct and indirect standardization; probability; hypothesis testing; interval estimation; inference for means and proportions; simple linear regression, etc. Statistical computing is fully integrated into the course. Not open to freshmen or sophomores. Students MUST register for a lab, and a lecture section.

Fall PHP2500 S01 12727 TTh 9:00-10:20(08)

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. Students MUST register for a lab, and a lecture section.

Fall PHP2510 S01 12734 TTh 9:00-10:20(08)

2511 Applied Regression Analysis
Applied multivariate statistics, presenting a unified treatment of modern regression models for discrete and continuous data. Topics include multiple linear and nonlinear regression for continuous response data, analysis of variance and covariance, logistic regression, Poisson regression, and Cox regression. Prerequisite: APMA 1650 or PHP 2510. Open to graduate and medical students only. Students MUST register for a lab, and a lecture section.

Spr PHP2511 S01 21763 TTh 9:00-10:20(08)

2520 Statistical Inference I
First of two courses that provide a comprehensive introduction to the theory of modern statistical inference. PHP 2520 presents a survey of fundamental ideas and methods, including sufficiency, likelihood based inference, hypothesis testing, asymptotic theory, and Bayesian inference. Measure theory not required. Open to graduate and medical students only.

Fall PHP2520 S01 12736 MW 8:30-9:50(02)

2530 Bayesian Statistical Methods
Surveys the state of the art in Bayesian methods and their applications. Discussion of the fundamentals followed by more advanced topics including hierarchical models, Markov Chain Monte Carlo, and other methods for sampling from the posterior distribution, robustness, and sensitivity analysis, and approaches to model selection and diagnostics. Features nontrivial applications of Bayesian methods from diverse scientific fields, with emphasis on biomedical research. Prerequisites: APMA 1650 and 1660, PHP 2510 and 2511, or equivalent.

Fall PHP2530 S01 16696 TTh 2:30-3:50(11)

2540 Advanced Methods for Multivariate Analysis
Survey of modern statistical methods for analysis of multivariate and high-dimensional data. Topics include inference for multivariate normally distributed data, methods for data reduction, classification and clustering, multiple comparisons for high-dimensional data, analysis of multidimensional contingency tables, and functional data analysis. Applications to diverse areas of scientific research, such as genomics, biomarker evaluation, and neuroscience will be featured. Prerequisites: APMA 1650 and 1660; or PHP 2520. Open to graduate students only.

Spr PHP2540 S01 23501 MW 10:00-11:20(03)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
40 / Biology and Medicine

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 graduate students only.

Spr PHP2580 S01 23926 MW 8:30-9:50(02)

2601 Linear and Generalized Linear Models
Generalized linear models provide a unifying framework for regression. Important examples include linear regression, log-linear models, and logistic regression. GLMs for continuous, binary, ordinal, nominal, and count data. Topics include model parameterization, parametric and semiparametric estimation, and model diagnostics. Methods for incomplete data are introduced. Computing with modern software is emphasized. Prerequisites: APMA 1650 or PHP 2520. Open to graduate students only.

Fall PHP2601 S01 13693 TTh 1:00-2:20(10)

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 graduate students only.

Spr PHP2602 S01 23621 TTh 2:30-3:50(11)

2603 Analysis of Longitudinal Data
Comprehensive coverage of methods for drawing inference from longitudinal observations. Theoretical and practical aspects of modeling, with emphasis on regression methods. Topics include: multilevel and marginal models; estimation methods; study design; handling dropout and mismeasurement; methods for observational data (e.g. time-dependent confounding, endogeneity, selection bias). SAS and S-Plus software are used. Prerequisite: Statistical inference (APMA 1650-1660 at minimum), regression (PHP 2511), working knowledge of matrix algebra (e.g. MATH 0520).

Spr PHP2603 S01 26449 TTh 1:00-2:20(10)

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 2500/01/02 or PHP 2510/11) recommended. Other students should contact instructor. Intro to software R and Bioconductor tools provided in lab.

Spr PHP2620 S01 26450 TTh 10:30-11:50(09)

2950 Doctoral Seminar in Public Health
The purpose of this seminar is to facilitate discussions of current scientific literature in epidemiology, biostatistics, health services, and public health in general. The main goal is to expose students to current methodological issues and controversies in epidemiology, biostatistics, health services, and public health, in an effort to integrate knowledge across disciplines. This seminar is by instructor permission only and is only open to doctoral students in Epidemiology, Biostatistics and Health Services Research.

Fall PHP2950 S01 14593 M 12:00-1:20(12)
Spr PHP2950 S01 24930 M 12:00-1:20(05)

2980 Graduate Independent Study and 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’s permission required.
Fall; Spr

2985 MPH Independent Study for Thesis Preparation and Research
This optional half credit course may be taken up to two times during preparation for the MPH degree. It provides MPH students with self-directed thesis research and preparation time under the guidance of a thesis advisor. Prior to taking this course the student and advisor must reach agreement as to what constitutes satisfactory completion of the course (e.g., completion of a satisfactory literature review, attainment of specific thesis benchmarks, or completion of the thesis). Please check Banner for the correct section number and CRN to use when registering for this course. Instructor’s permission required.
Fall; Spr

2990 Thesis Preparation
No description available.

Fall PHP2990 S01 13102 ‘To Be Arranged’
Spr PHP2990 S01 21795 ‘To Be Arranged’

BioMed-Neuroscience

(Primarily for Undergraduates)

0010 The Brain: An Introduction to Neuroscience
Introduction to the mammalian nervous system with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory systems, control of movement and speech, learning and memory, emotion, and diseases of the brain. No prerequisites, but knowledge of biology and chemistry at the high school level is assumed. LILE

Sum NEUR0010 S01 60298 MTWTh 1:00-3:00 (R. Patrick)
Fall NEUR0010 S01 12038 TTh 1:00-2:20(10) (M. Paradiso)

0650 Biology of Hearing
Examines the sensory and perceptual system for hearing: the external, middle, and inner ears; the active processes of the cochlea; sound transduction and neural coding; neural information processing by the auditory system; and the nature of auditory perception and its biological substrate. Prerequisite: an introductory course in Neuroscience, Cognitive Science, Physics, Engineering or Psychology.

Spr NEUR0650 S01 21588 MWF 1:00-1:50(06) (J. Simmons)

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 26272 ‘To Be Arranged’ (R. Patrick)

(For Undergraduates and Graduates)

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.

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.

Fall NEUR1030 S01 12286 TTh 10:30-11:50(09)

1600 Experimental Neurobiology
Intensive laboratory experience in neuroscience appropriate for students with basic background in Neurobiology. Learn and apply 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. Labs are supplemented by informal lectures. Prerequisites: NEUR 0010, 1020, and PHYX 0300; or equivalent. Instructor permission required; enrollment limited to 15. Sign up sheet in Sidney Frank Hall, Room 315 beginning November 1, 2011. WRIT

Sum NEUR1600 S01 60299 MW 1:30-5:30 (J. Stein)
Spr NEUR1600 S01 21590 W 1:00-5:00(14) (J. Stein)

1670 Neuropharmacology and Synaptic Transmission
Synaptic transmission will be studied from a biochemical and pharmacological point of view. We will explore the factors regulating neurotransmitter synthesis, storage, release, receptor interaction, and termination of action. Proposed mechanisms of psychoactive drugs and biochemical theories of psychiatric disorders will be examined. Prerequisites: NEUR 0010 and BIOL 0200 or the equivalent. Students MUST register for a lab, and a lecture section.

Fall NEUR1670 S01 12741 TTh 9:00-10:20(08) (R. Patrick)

1680 Computational Neuroscience
A lecture and computing lab course providing an introduction to quantitative analysis of neural activity and encoding, as well as modeling of neurons and neural systems. Emphasizes Matlab-based computer simulation. Prerequisites: NEUR 0010, 1020 or 1030; APMA 0410 or 1650, or equivalent. Sign-up sheet in Sidney Frank Hall, Room 315 beginning April 19, 2011. Enrollment limited to 10. Instructor permission required.

Spr NEUR1680 S01 21592 ‘To Be Arranged’ (L. Bienenstock)

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 monoallelic diseases (e.g. Fragile X Syndrome, Duchenne Muscular Dystrophy and Tuberosus 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 25657 TTh 10:30-11:50(09) (J. Fallon)

1930 Topics in Neuroscience
Seminars on selected topics in neuroscience designed to examine recent research, with an emphasis on critical reading of original research reports. Topics vary from year to year. Preference given to senior neuroscience concentrators. Prerequisites: NEUR 1020, 1030. Enrollment limited to 15.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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 12296 "To Be Arranged" (D. Sheinberg)

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

Spr NEUR2020 S01 21595 "To Be Arranged" (D. Sheinberg)

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.

Spr NEUR2030 S01 24892 "To Be Arranged" (D. Lipscombe)

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 26278 "To Be Arranged" (G. Barnea)

2050 Advanced Systems Neuroscience
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.

Fall NEUR2050 S01 16386 "To Be Arranged" (J. Sanes)

2120 Topics in Visual Physiology
Selected topics in visual physiology are examined through a close and critical reading of original research articles. Emphasizes the anatomical and physiological bases of visual function. Primarily for graduate students with a strong background in neuroscience and a working knowledge of the anatomy and physiology of the mammalian visual system. Offered in alternate years. Instructor permission required.

Spr NEUR2120 S01 26554 "To Be Arranged" (D. Berson)

2930C Historical Foundations of the Neurosciences
Two year sequence starting Fall 2010; students register for one year at a time. The first year (2010-2011) will examine the history of basic neuroscientific concepts from the late Greeks (Galen) to the later 19th century, up to Cajal (neuron doctrine) and Sherrington (reflexes and integration). Since the seminar meets only monthly, it must be taken in the Fall and Spring semesters to receive a semester's credit. For credit, a substantial paper (approximately 15 pages) is required at the end of the Spring semester. Primarily for graduate students in neuroscience, cognitive science, and psychology. Others may be admitted after discussion with the instructor. Auditors are welcome if they share in the rotating duty of presenting seminars. Sign-up sheet in Sidney Frank Hall, Room 315 beginning April 19, 2011.

Fall NEUR2930C S01 12313 "To Be Arranged" (S. Greenblatt)

2930E Bench to Bedside: Unraveling Diseases of the Nervous System
Enrollment restricted to graduate students.

Fall NEUR2930E S01 13691 "To Be Arranged" (D. Lipscombe)

2940 Advanced Topics in Neuroscience
Continuation of a two year sequence focusing on the conceptual foundations in the history of neuroscience, from the late nineteenth century to the present. Primarily for graduate students in neuroscience, cognitive science, and psychology, but senior undergraduates may be admitted with written permission from the instructor. Seminar meets monthly, and must be taken for the full year to receive one semester credit. Instructor’s permission required.

Spr NEUR2940G S01 23489 "To Be Arranged" (S. Greenblatt)

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 12364 "To Be Arranged" (D. Sheinberg)

Spr NEUR2970 S01 21678 "To Be Arranged" (D. Sheinberg)

2980 Graduate Independent Study
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor’s permission required.

Fall; Spr

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

Fall NEUR2990 S01 12779 "To Be Arranged" (D. Lipscombe)

Spr NEUR2990 S01 21767 "To Be Arranged" (D. Lipscombe)

Catalan see Hispanic Studies

Chemistry

(Primarily for Undergraduates)

0080 First Year Seminars
Enrollment limited to 20 first year students.

0080B Molecular Structures in Chemistry and Biology
This course will consist of a survey of historical developments and concepts of three dimensional structures of molecules. The course will conclude with a survey of the current state of the art of structure determination and 3D structure motifs for small molecules, nanomaterials and biological macromolecules. This freshman only seminar will be strictly limited to a maximum of 20 students. FYS

Fall CHEM0080B S01 13735 MWF 9:00-9:50(02) (P. Williard)
0100 Introductory Chemistry
Explores stoichiometry, atomic and molecular structure, chemical bonding, solutions, gases, chemical reactions, equilibria, thermochemistry. Three hours of lecture, one conference per week, no laboratory section. S/N/C. Students MUST register for a conference, and a lecture section.

Fall CHEM0100  S01  13584  MWF 11:00-11:50(04)  (S. Russo-Rodriguez)

0330 Equilibrium, Rate, and Structure
Explores the electronic structure of atoms and molecules, thermodynamics, solution equilibrium, electrochemistry, chemical kinetics, and reaction mechanisms. Three hours of lecture and five hours of prelaboratory and laboratory per week. Required background: CHEM 0100 or AP Chemistry 4 or CHEM 0330 Placement Test 8 or IBC Chemistry.

Students MUST register for all four components of this course (the common meeting, lecture, lab and conference) during the SAME registration session. Banner will not allow a student to register for one component without registering for the other three at the same time. Furthermore, if one component of the course is dropped, all four components will be dropped. This course is offered in both Fall and Spring semesters. Students who need to take only one chemistry course in order to satisfy a concentration requirement are encouraged to enroll in CHEM 0330 in the Spring semester.

Sum CHEM0330  S01  60272  MWF 9:00-11:40  (K. Hess)
Fall CHEM0330  M01  14343  "To Be Arranged"
Fall CHEM0330  S01  12255  MWF 10:00-10:50(01)  (D. Swei)art)
Fall CHEM0330  S02  12466  TTh 10:30-11:50(01)  (C. Rose-Petruck)
Spr CHEM0330  M01  24261  "To Be Arranged"
Spr CHEM0330  S01  23520  TTh 10:30-11:50(01)  (C. Bazemore-Walker)

0350 Organic Chemistry
Sequel to CHEM 0330. Investigates the constitution and properties of the different classes of organic compounds, with considerable attention to reaction mechanisms. The laboratory work involves an introduction to microscale preparative and analytical techniques of organic chemistry and the preparation of representative organic compounds. Three hours of lecture and five hours of prelaboratory and laboratory. Prerequisite: CHEM 0330. Students MUST register for a common meeting, a lecture section, a lab and a conference.

Sum CHEM0350  S01  60383  MWF 9:00-11:40  (M. Zimm)
Spr CHEM0350  M01  24822  "To Be Arranged"
Spr CHEM0350  S01  21571  MWF 9:00-9:50(01)  (A. Basu)
Spr CHEM0350  S02  21729  TTh 9:00-10:20(01)  (S. Delaney)

0360 Organic Chemistry
Sequel to CHEM 0350. Investigates the constitution and properties of organic compounds at a fundamental level with an introduction to physical organic, bioorganic, and synthetic organic chemistry. Laboratory work is concerned with the identification and characterization of organic compounds, including modern instrumental methods. Three hours of lecture and five hours of prelaboratory and laboratory. Prerequisite: CHEM 0350. Students MUST register for a lecture section, a lab and a conference.

Fall CHEM0360  M01  15871  "To Be Arranged"
Fall CHEM0360  S01  12256  MWF 9:00-9:50(01)  (A. Basu)
Fall CHEM0360  S02  12685  TTh 9:00-10:20(01)  (J. Sello)

0400 Biophysical and Bioinorganic Chemistry
Examines aspects of physical and inorganic chemistry relevant to biochemistry: thermodynamics of hydrophobic and hydrophilic interactions, electrically charged membranes, coordination chemistry, active and passive transport, enzyme kinetics and mechanisms, metal-based drugs, and physical methods. Three hours of lecture and five hours of laboratory. Prerequisite: CHEM 0360 and MATH 0100 or

0170. Prerequisite or corequisite: PHYS 0040 or 0060. Students MUST register for a lecture section and a lab.
Spr CHEM0400  S01  21572  MWF 11:00-11:50(04)  (E. Kim)

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  21573  MWF 11:00-11:50(04)  (W. Bernskoetter)

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.

Fall

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. Instructor’s permission required.

Spr

(For Undergraduates and Graduates)

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. Students MUST register for a lab, and a lecture section.

Fall CHEM1060  S01  12366  MWF 9:00-9:50(02)  (E. Kim)

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 explored. Prerequisites: CHEM 0330, MATH 0180 or equivalent, PHYS 0040 or 0060 or equivalent. Recommended but not required: MATH 0520 or equivalent.

Fall CHEM1140  S01  12367  MWF 10:00-10:50(03)  (L. Wang)

1150 Physical Chemistry: Thermodynamics and Statistical Mechanics
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  21636  MWF 10:00-10:50(03)  (L. Wang)

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  21637  MW 1:00-5:20(06)  (G. Diebold)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
1220 Computational Tools in Biochemistry and Chemical Biology
Introduction to computational tools used to analyze protein sequences and structures, DNA sequence analysis, RNA structure, biochemical pathways and the analysis of microarray data. Extensive use of programs such as AMBER, BLAST, PSIBLAST and a discussion of their limitations. Enrollment limited to 20. Prerequisite: BIOL 0280; CHEM 0305, CHEM 0360, and BIOL 0280 OR BIOL 1270.

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 0350, CHEM 0360, and BIOL 0280 OR BIOL 1270.

Fall
CHEM1230 S01 12369 MW 8:30-9:50(02) (J. Suggs)

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, stereocchemistry, 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 0350-0360, A or B performance preferable) plus at least one semester of Biochemistry (BIOL 0280, BIOL 1270). Enrollment limited to: 25 students, written permission required. 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. Enrollment limited to 25.

Spr
CHEM1240 S01 21638 TTh 9:00-10:20(08)

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 and a lab.

Spr
CHEM1450 S01 21639 MW 8:30-9:50(02) (C. Seto)

1560 Topics in Advanced Chemistry
Lecture units on various topics of interest in chemistry. Topics will be announced. Evaluation is based primarily on literature research papers in the areas of the units completed.

1560D Chemistry and Biology of Naturally Occurring Antibiotics
Small molecules produced by organisms for chemical defense have long been exploited in medicine, biotechnology, and biological research. 1560D will examine the origins, uses, modes of action, and preparations of some of the most important and useful of these "antibiotic" molecules. Given the inter-disciplinary nature of this topic, this course is open to students with backgrounds in the biological and/or physical sciences. Familiarity with concepts of organic chemistry and biochemistry will be assumed.

Spr
CHEM1560D S01 26456 MWF 10:00-10:50(03) (J. Sello)

1560E Biological Mass Spectrometry
This seminar course will survey the instrumentation, methods, and applications of modern biological mass spectrometry. Through lecture and interactive discussions, we will explore the fundamentals of mass spectrometry. We will then proceed to cover a series of topics relevant to protein and peptides analysis. The seminar will conclude with an exploration of recent developments in instrumentation or applications of particular interest to the participants. Recommended pre-requisites: CHEM 0360, BIOL 0280, PHYS 0040. Enrollment limited to 20.

Fall
CHEM1560E S01 16710 F 9:30-11:50(03) (C. Bazemore-Walker)

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 26011 MWF 11:00-11:50(04) (P. Williard)

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. Students MUST register for a lab, and a lecture section.

Fall
CHEM1560K S01 17177 TTh 1:00-2:20(10) (M. Meuwly)

1560L Modern Natural Product Biosynthesis
This course will cover the biosynthesis of the major classes of natural products - polyketides, non-ribosomal peptides, including beta-lactam antibiotics, terpenes, alkaloids and vitamins. The readings from original literature will cover the chemical logic and mechanisms of biosynthetic pathways and individual reactions, including isotopic labeling for whole-cell feeding experiments, stable isotopic NMR analysis, and mass spectrometry. Modern topics include genomics of natural product biosynthesis, genome mining, and pathway engineering. Prerequisites: CHEM 0350 and 0360. Recommended: CHEM 1230, 1240, or 1450. Enrollment limited to 25 juniors and seniors.

Fall
CHEM1560L S01 17153 TTh 10:30-11:50(09) (D. Cane)
Classics / 45

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
46 / Classics
Chinese see East Asian Studies

Classics

Classics

(Primarily for Undergraduates)

0010 The Greeks
For centuries Western civilizations have seen the Greeks as their intellectual and spiritual ancestors. The ‘Greek miracle’ is explored by reviewing its major achievements and discoveries: poetry (heroic epic, tragedy, political comedy), philosophy, historical research, political analysis and institutions, science. All texts read in English. LILE WRIT

Fall CLAS0010 S01 14330 MWF 11:00-11:50(04) (J. Hanink)

0210 Topics in Classical Literature and Civilization
First Year Seminars - open to 20 first-year students only. FYS

0210O Sport in the Ancient Greek World
Athletics and sports were as popular and significant in the ancient Greek world as they are today, and so offer an excellent introduction to its archaeology and history. This class will discuss the development of Greek athletics, the nature of individual events, the social implications of athletic professionalism, women and athletics, and the role of sport in Greek education. Enrollment limited to 20 first-year students. FYS

Fall CLAS0210O S01 16849 TTh 1:00-2:20(10) (J. Cherry)

0660 The World of Byzantium
Caught between the East and West, the culture of Byzantium inherited the ancient worlds of Greece, Rome, and Jerusalem, nurturing many a modern ideology, conflict, and identity. Byzantium is explored through its history, texts, and art. We examine the foundation and history of Constantinople, Iconoclasm, the Crusades, medieval Christianity and Islam, Byzantine court life, concepts of gender, self, and sexuality. WRIT

Fall CLAS0660 S01 15953 TTh 10:30-11:50(09) (E. Papaioannou)

0760 Ancient Utopias/Imaginary Places
Literary depictions of idealized imaginary societies already had a long tradition when Thomas More produced his Utopia in 1516. This course explores the ancient Greco-Roman utopian tradition, examining both literary depictions of mythological or fantastic utopias (or dystopias), including representations of societies remote in time ("the Golden Age") or place (e.g., Homer's Phaeacia), and works that critique contemporary values or attempt to describe idealized possible societies (e.g., Plato's Republic). These Greco-Roman depictions in turn provided the foundation for the utopian (and dystopian) tradition as it continued through the Medieval age and into modernity, and we will also follow that tradition. DVPS LILE WRIT

Fall CLAS0760 S01 16850 MWF 1:00-1:50(06) (J. Debrohun)

(For Undergraduates and Graduates)

1120 Comparative Themes and Topics

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. LILE WRIT

Spr CLAS1120B S01 26608 MWF 11:00-11:50(04) (P. Nieto Hernandez)

1120E Slavery in the Ancient World
Examines the institution of slavery in the ancient world, from Mesopotamia and the Near East to the great slave societies of classical Greece and (especially) imperial Rome; comparisions of ancient and modern slave systems; modern views of ancient slavery from Adam Smith to Hume to Marx to M.I. Finley. Readings in English. LILE

Spr CLAS1120E S01 26609 TTh 1:00-2:20(10) (J. Bodel)

1120G The Idea of Self
Literature gestures us toward a certain kind of knowledge not quite psychological, not quite philosophical. We read widely in the classical and medieval traditions in order to gauge the peculiar nature of what this knowledge tells us about experience and the ways in which expressions of selfhood abide or are changed over time. Authors include Sappho, Catullus, Horace, Virgil, Lucan, Anselm, Heloise, Hildegard, Carmina Burana, Abelard. LILE WRIT

Fall CLAS1120G S01 15507 MWF 2:00-2:50(07) (J. Pucci)

1120Q Seven Wonders of the Ancient World
"Everyone has heard of the Seven Wonders of the World," wrote Philo of Byzantium two millennia ago, and it's still true today. But what is a "Wonder"? And why seven of them? Why make such a list anyway, then or now? This class will use ancient texts, explorers' accounts, and archaeological investigations to travel through several thousand years of history in the Mediterranean and Near Eastern world. We will consider how the Seven Wonders captured past imaginations; the aura of technological achievements; the intersections of history, memory, invention, and myth; and how members of one culture view another culture's monuments. LILE

Spr CLAS1120Q S01 26928 MWF 2:00-2:50(07) (J. Cherry)

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

Spr CLAS1120T S01 26947 TTh 1:00-2:20(10) (L. Mignone)

1140 Classical Philosophy of India
This course introduces the classical traditions of philosophy in India. After presenting a general overview of this discourse and its basic Brahminic, Buddhist, and Jain branches, the course will examine selected traditions and themes from both the several schools concerned entirely with gaining ultimate beatitude (the Highest Good) (the schools known as Sāmkhya, Yoga, Theravada Buddhism, Mahāyāna Buddhism, Jainism, and Vedānta) and the schools that concentrate on issues of logic, metaphysics, and language and hermeneutics (Nyāya, Vaiśeṣika, and Pūrva Mīmāṃsā, respectively). DVPS

Spr CLAS1140 S01 26930 TTh 10:30-11:50(09) (J. Bodel)

1160 Classics of Indian Literature
This course will introduce, in English translations, the belles lettres of India, primarily of ancient and 'medieval' India and of works originally in Sanskrit. We will read selections of the best poetry, drama, and narrative literature of Indian civilization—Kālidāsa’s play, Sakuntalā, his epic poem The Birth of the Divine Prince, the plays of Bhāṣa, the prose
of Dandin's Adventures of the Ten Princes or Bāna's classic novel Kādambarī, or selections from Brhatkathā, works by Kathāsarasvātī, etc. We may also sample some classical Tamil poetry (see A. K. Ramanujan's The Interior Landscape or contemporary "classics" such as Banerjee's Bengali novel Panthali. DVPS

1210 The History of Greece from Archai Times to the Death of Alexander
A detailed examination of the history of the Greeks-political, economic, and social-from Homer's time to the establishment of the Hellenistic monarchies by the successors of Alexander the Great. The ancient sources are closely and critically studied (in translation).

1220 The History of Greece from Archai Times to The Death of Alexander
See The History Of Greece From Archai Times To The Death Of Alexander (CLAS1210) for course description.

1750 Undergraduate Seminar

1750D Philosophy of Socrates
In this class we will read and discuss various ancient portraits of Socrates (in Aristophanes' Clouds, Plato's Apology and Symposium, and Xenophon's Apology) and several Platonic dialogues representing Socrates in action discussing moral questions, including the Crito, Laches, Charmides, Lesser Hippias, Protagoras, and Gorgias. We will focus on questions about the historical Socrates (as distinct from the portraits), his avowals of ignorance, irony, methods of argument, and interest in definition, as well as the moral questions explored in the dialogues. All readings will be in English translation. Enrollment limited to 20.

1750L Erotic Desire in the Premodern Mediterranean
Erotic desire may be a universal human phenomenon. How we explain, depict, express, or experience desire is, however, not a universal, uniform matter. The premodern Mediterranean (from roughly the fifth century BCE to the fifteenth century CE) gives us a variety of forms of sexual experience and expression. We will study the history of these forms through texts, images, and objects: from Platonic love or eros to Roman tales of romance, from Judeo-Christian mysticism to Islamic literature, from sexual diets to erotic amulets. Enrollment limited to 25.

1930 Special Topics

1930A Introduction to Greek and Latin Meters
We will survey the major metrical systems of Greek and Roman verse by reading a wide range of short poems and brief extracts. The main concerns will be, first, how to scan poems correctly, and second, how to evaluate metrical and rhythmic choices. Prerequisite: GREK/LATN 0400, or demonstration of equivalent ability in Greek and Latin.

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. Instructor's permission required.

1990 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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
48 / Classics
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.

Sum GREEK100 S01 02287 MTWTh 1:00-3:00 (T. Haase)
Fall GREEK100 S01 10272 MWF 10:00-10:50 & TTh 12:00-12:50(03)

0110 Introduction to Ancient Greek
Intensive, one-semester introduction to Greek. No previous knowledge of Greek is required.
Spr GREEK0110 S01 25982 MWF 1:00-1:50 & TTh 12:00-12:50(06)

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 GREEK0200 S01 20247 MWF 9:00-9:50 & TTh 12:00-12:50(02)

0300 Introduction to Greek Literature
Introduction to Greek literature through intensive reading. Prerequisite: GREEK 0200, GREEK 0110, or the equivalent. We will work on grammar skills while reading extensively in the Histories of Herodotus, who is not only the "father of history" but also a great (and delightful) artist in prose.
Fall GREEK0300 S01 10273 MWF 11:00-11:50(04)

0310 Grammar Review and Composition
Half-credit course with attention to student's individual needs.
Fall GREEK0310 S01 14695 MWF 1:00-1:50(06)

0400 Introduction to Greek Literature
Prerequisite: GREEK 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 GREEK0400 S01 20248 TTh 9:00-10:20(08)

(For Undergraduates and Graduates)

1050 Greek Drama
1050A Aristophanes
Addresses students with at least an intermediate-level command of Ancient Greek, but previous knowledge of Aristophanic language and poetry is not required. We will read in the original language Aristophanes' Frogs, and study different aspects (language, meter, historical background, theatrical performances, literary interpretations, etc.) of this play and of Aristophanic comedy generally. Frogs, composed towards the end of the Peloponnesian War, is one of Aristophanes' most puzzling plays. It presents a fantasy (and comic!) vision of the afterlife and, indirectly, informs us about the literary criticism of the time.
Spr GREEK1050A S01 26611 MWF 1:00-1:50(06) (P. Nieto Hernandez)

1110 Selections from Greek Authors
1110Q Greek Erotic Literature: From Plato to the Medieval Romances
Survey of desire in Greek writing, with an emphasis on post-classical texts. Exploration of Platonic love, Roman Greek literature on eros, friendship in late antique and medieval rhetoric and letter-writing, erotic epigrams from Imperial to Middle Byzantine times, depictions of the erotic in hagiographical texts, and, finally, the twelfth-century revival of romantic fiction. Four semesters of Greek required.
Spr GREEK1110Q S01 26612 TTh 1:00-2:20(10) (E. Papaioannou)

1110U Survey of Post-Classical Greek (2nd-12th century CE)
This course will study the development of post-classical Greek language and literature with an emphasis on three traditions—the Second Sophistic, late antique discourse (4th-5th centuries), and writing in medieval Constantinople (9th-12th centuries)—through a close reading of texts from a variety of styles, authors, and genres. The selections will be tailored to the needs of the participants. Prior knowledge of Greek (an equivalent of 2 years) is required. Prerequisite: GREEK 0400 or instructor permission. Enrollment limited to 20.
Fall GREEK1110U S01 17046 F 3:00-5:20(15) (E. Papaioannou)

1110V Greek Funeral Orations
Survey of classical Greek funeral orations; authors to be covered include Thucydides, Plato, Demosthenes, and other fourth century prose writers. The emphasis of the course will be on Greek grammar and techniques of prose translation, though throughout the semester we will also be discussing the nature of ancient Greek commemorative discourses, particularly in classical Athens. Some background on Greek lament and other funerary genres will be provided, and short supplementary texts may range from Homeric excerpts to inscribed epitaphs. Students should already have four semesters of ancient Greek (completion of GREEK 0400) or the equivalent.
Fall GREEK1110V S01 17167 MWF 9:00-9:50(02) (J. Hanink)

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 GREEK1140 S01 16853 TTh 2:30-3:50(11) (P. Nieto Hernandez)

1260A Plato's Protagoras
Plato's Protagoras is a literary and philosophical masterpiece representing a great gathering of intellectuals, including Socrates and the sophist Protagoras. The two men try to out-wit each other on such topics as political theory, literary criticism, and education. Major questions throughout the discussion are: What is the role of knowledge in a successful life, and how can we acquire knowledge that leads to success? We will read the dialogue in Greek. Prerequisite: two years of Greek (GREEK 0400) or demonstrated equivalent ability.
Spr GREEK1260A S01 26952 TTh 2:30-3:50(11) (M. Gill)

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 GREEK1820 S01 16854 TTh 1:00-2:20(10) (A. Scafuro)

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. Instructor's permission required.
Fall, Spr

1990 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.
Fall, Spr

(Primarily for Graduates)
2100 Graduate Seminar

2100D Ancient Literary Criticism
Survey of ancient literary theory, with an emphasis on Greek sources. Topics to be covered include the representation of poets, the nature of inspiration, the elements of literary style, the moral and ethical uses (and dangers) of poetry, mimesis, the relationship between poetry and citizenship, literature and education, etc. We will read, in Greek, excerpts from (e.g.) Aristophanes' Frogs, Plato's writings on poetry, Aristotle's Poetics, Plutarch's How a young man should study poetry, and pseudo-Longinus' On the Sublime. Students will be evaluated on the basis of in-class presentations, two translation exams, and a seminar paper.

Spr GREG2100D S01 26782 Th 4:00-6:20(16) (J. Hanink)

2110 Graduate Seminar

2110G Political Trials: Treason and Accountability in Fourth Century Athens
In studying trials of treason and accountability, we shall examine the democratic ideologies and political factionalism that fueled the trials and also the legal armature that rendered them possible. Our sources for the most part are speeches written by the Attic orators (Demosthenes, Aeschines, Lycourgos, Deinarchos, and Hyperides) and include impeachment trials for treason by commission of adultery, for having the wrong dream in the Amphipoleion, for leaving Athens in wartime; an accountability trial for treasonous conduct while serving on an embassy; and trials (including the prosecution of Demosthenes) for accepting bribes from Alexander's agent, Harpalos.

Fall GREG2110G S01 17031 W 3:00-5:20(14) (A. Scafuro)

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 GREG2970 S01 10328 'To Be Arranged'
Spr GREG2970 S01 20326 'To Be Arranged'

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.

Fall; Spr

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 GREG2990 S01 10353 'To Be Arranged'
Spr GREG2990 S01 20357 'To Be Arranged'

Latin

(Primarily for Undergraduates)

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.

Sum LATN0100 S01 60291 MWF 1:00-3:40 (J. Pucci)
Fall LATN0100 S01 10429 MWF 9:00-9:50 & TTh 12:00-12:50(02)

0110 Introduction to Latin
Intensive, one-semester introduction to Latin. No previous knowledge of Latin is required.

Fall; Spr

0310 Grammar Review and Composition
Half-credit course with attention to student's individual needs.

Fall LATN0310 S01 14696 MWF 1:00-1:50(06)

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 20360 MWF 9:00-9:50(02)

(For Undergraduates and Graduates)

1010 Latin Lyric: Catullus and Horace
Introduction to Latin lyric poetry through the poems of its finest representatives, Catullus and Horace. Emphasis placed on careful reading of the poems, which will be considered individually, as parts of a collection, and as representatives of the poetry we call lyric. The primary objective of the course is to improve students' ability to read Latin lyric poetry fluently, in terms of meter, grammar, syntax, and literary-critical appreciation. We will also read and discuss a selection of seminal articles on ancient lyric, and students will get experience (and guidance) writing scholarly criticism.

Fall LATN1010 S01 16856 MWF 11:00-11:50(04) (J. Debrohun)

1040 Virgil

1040A Virgil: Eclogues and Georgics
Virgil, most famous as the poet of the Aeneid, began his career with two smaller masterpieces: a collection of ten bucolic poems (Eclogues) modeled on the Idylls of the Hellenistic poet Theocritus, and a didactic work on agriculture in four books, the Georgics, which found its inspiration both in Hellenistic models and in more recent Roman antecedents (including Lucretius' De Rerum Natura) and is viewed by many as the poet's finest achievement. We will read selections from both works, concluding with the epyllion at the end of Georgics Four, which relates the tragic love story of Orpheus and Eurydice.

Spr LATN1040A S01 26613 MWF 1:00-1:50(06) (J. Debrohun)

1060 Roman Historical Writing

1060F Ovid
Reading of selections from Ovid's poetry, with emphasis placed both on close reading and on the texts' engagement with poetic issues (genre and intertextually) and with the wider political and cultural issues of Augustan Rome.

Fall LATN1060F S01 17058 MWF 1:00-1:50(10) (J. Reed)

1060I Senecan Tragedy
Close reading and thorough translation of two Senecan revenge tragedies, the Medea and Thyestes. Emphasis will be on translation of the Latin, but as time permits we will also be discussing the two plays

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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in their mythological, cultural, historical, and performance contexts. Students should already have four semesters of Latin (LATN 0400) or the equivalent.

Spr LATN1060I S01 26951 TTh 9:00-10:20(08) (J. Hanink)

1110 Selections from Latin Authors

1110I Lucretius

Lucretius’ De Rerum Natura, a long philosophical poem, is both a major source for Epicurean philosophical thought and an example of the ambitious Latin poetry of the late Roman Republic. We will read extensive selections from the poem in Latin. Our aim will be to make a detailed exploration of these sections through close reading of the Latin text and discussion of linguistic, literary, and cultural problems.

Fall LATN1110I S01 16857 TTh 9:00-10:20(08) (J. Reed)

1120 Selection from Later Latin Authors

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 26618 MWF 2:00-2:50(07) (J. Pucci)

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 26614 TTh 10:30-11:50(09) (J. Reed)

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.

Fall; Spr

1990 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.

Fall; Spr

(Primarily for Graduates)

2080 Graduate Seminar

2080C Late Latin Poetry

We will read widely and quickly in a selection of poets (Prudentius, Claudian, Sidonius, etc.) but focus our work on the poetry of Fortunatus and Alcuin, paying attention especially to textual issues and the history of scholarship, such as it is, of select poems. Reading knowledge of French required. The seminar will convene for one week at the conference on late Latin poetry to be held in October 2011 on campus. Open to graduate students; advanced undergraduates may enroll with instructor permission.

Fall LATN2080C S01 17039 Th 4:00-6:20(13) (J. Pucci)

2090 Graduate Seminar

2090D Propertius

We will concentrate especially on the elegist’s third book, which has been viewed both as a work of closure (a farewell to the erotic themes dominant in the earlier books) and as transitional (as the poet moves toward the more overtly Callimachean stance and political themes that will characterize the fourth book). While our primary interest will be literary-critical, including especially the elegist’s engagement with his Roman contemporaries, we will also engage seriously with textual criticism, employing Heyworth’s Cynthia and the new Oxford commentary on Book 3 (in addition to the other major commentaries).

Spr LATN2090D S01 26616 F 3:00-5:20(15) (J. Debrohun)

2120 Graduate Seminar

2120A Roman Epigraphy

A practical introduction to the study of Latin inscriptions, with emphasis on the reading, editing, and interpretation of texts on stone. Class time will be divided between discussion of various categories of texts in the light of the 'epigraphic habit', literacy, and the sociology of reading in antiquity and hands-on experience with editing inscriptions on stone.

Fall LATN2120A S01 16883 M 3:00-5:20(13) (J. Bodel)

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 10543 "To Be Arranged"
Spr LATN2970 S01 20403 "To Be Arranged"

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.

Fall; Spr

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 10560 "To Be Arranged"
Spr LATN2990 S01 20481 "To Be Arranged"

Modern Greek

(Primarily for Undergraduates)

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 10561 MW 12:00-12:50 & TTh 12:00-12:50(12) (E. Amanatidou)

0200 Introduction to Modern Greek

A continuation of MGRK 0100. New students may place into it, after special arrangement with the instructor. The course continues on an integrative skills approach and aims to develop language skills, within a framework of specific topics and functions. The course objectives are to enable students to perform a range of tasks, master a minimum core vocabulary and acquire knowledge and understanding of various forms of Greek culture.

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkssearch_public.P_Main).
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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.

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.

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

1800 Classical Schools of Indian Philosophy
Introduction to the classical Brahminic dārsanas (comprehensive, rationalized systems of philosophy and, or, theology dealing with Hermeneutics and Philosophy of Language, Logic, Metaphysics, and Ultimate Beatitude) and to corresponding Buddhist and Jain traditions through reading, in Sanskrit, of selected works. Prerequisite: SANS 0400.

1990 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.

0100 Elementary Sanskrit
A survey covering the roles of inherited and environmental determinants of human behavior. Topics include sensation, perception, learning, memory, motivation, emotion, neural processes, language, social development, personality assessment, obedience, interpersonal attraction, and the diagnosis, origins, and treatment of mental illness. Laboratory sections illustrate methodologies used to study these issues. Topic selection varies with instructor.

0020 Approaches to the Mind: Introduction to Cognitive Science (formerly COGS 0010)
Cognitive science is the study of the mind from an interdisciplinary perspective. It focuses on such questions as how do we process information to recognize objects and faces, to know that a cup is not a...
For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
Spr CLPS0700 S01 26729 TTh 1:00-2:20(10)

0701 Personality (formerly PSYC 0300)
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.

Spr CLPS0701 S01 25491 TTh 9:00-10:20(08) (B. Hayden)

0800 Language and the Mind (formerly COGS 0450)
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. LILE

Fall CLPS0800 S01 17103 MWF 10:00-10:50(03)

0810 The Biology and Evolution of Language (formerly COGS 0320)
Human language is made possible by specialized anatomy and brains that can regulate speech production, complex syntax, and acquiring and using thousands of words. This course examines Darwin’s theory of evolution and the archaeological and fossil records of human evolution; studies of chimpanzee communication, culture, and language which provide insights on human evolution; the physiology of human speech; and recent studies of the brain bases of human language and thought.

Spr CLPS0810 S01 25493 MWF 1:00-1:50(06) (P. Lieberman)

0900 Quantitative Methods in Psychology (formerly COGS/PSYC 0090)
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.

Sum CLPS0900 S01 60363 MWF 1:00-3:40 (J. Wright)
Fall CLPS0900 S01 15679 MWF 11:00-11:50(04) (K. Spoehr)
Spr CLPS0900 S01 25494 MWF 10:00-10:50(03) (J. Wright)

(For Undergraduates and Graduates)

1080 Topics in Cognitive, Linguistic, and Psychological Sciences

1080C Evolution of the Brain Bases of Creativity (formerly COGS 1860Z)
We humans share virtually all of our genes with chimpanzees, yet you are reading this sentence on a device that no chimpanzee could have made. For that matter, your grandparents would have been baffled had they encountered email. Creativity - the drive to think of new concepts, new ways of doing things, and new things - marks us. In this vein, we will read and discuss the findings of new studies that are exploring the neural bases and evolution of human creativity. We will also consider the alternative, that we are ruled by genes that evolved more than 50,000 years ago. Enrollment limited to 40.

Fall CLPS1080C S01 16982 W 3:00-5:20(14) (P. Lieberman)

1191 Animal Behavior Laboratory (formerly PSYC 1450)
This course is designed for students with a serious interest in animal behavior research. Topics include methods in lab and field research, enrichment programs for captive species and conditioning procedures for managing zoo and shelter animals. Prerequisites: CLPS 0900 (COGS/PSYC 0090). Enrollment limited to 12; not open to first year students.

Fall CLPS1191 S01 16983 M 1:00-5:50(13) (R. Colwill)

1192 Experimental Analysis of Animal Behavior and Cognition (formerly PSYC 1200)
A laboratory course on the prediction, control, and explanation of the behavior of animals in simple environments. Prerequisite: CLPS 0900 (PSYC/COGS 0090).

Fall CLPS1192 S01 15681 TTh 10:30-11:50(09) (R. Church)

1193 Laboratory in Genes and Behavior (formerly PSYC 1040)
Laboratory course in behavioral neuroscience for advanced students of psychology or neuroscience. The goal is to gain "hands on" research experience with a variety of behavioral assays used to assess the effects of genetic mutations on behavior. Over the course of the semester, students will examine the behavioral phenotype of a mouse model of human disease. A group of transgenic mice will be compared with a group of wild type control mice on three batteries of behavioral tasks designed to test cognitive, affective, and sensorimotor behavior. Recent classes have tested mice models of Fragile X Mental Retardation, Duchenne's Muscular Dystrophy, and Alzheimer's Disease. Over the course of the semester, each student will complete statistical analysis of the data and prepare a manuscript suitable for publication in a scientific journal. Prerequisites: CLPS 0410 (PSYC 0750) or NEUR 0010, and CLPS 0900 (PSYC/COGS 0090), or instructor permission. Enrollment limited to 21; not open to first year students. Students MUST register for a lab, and a lecture section.

Spr CLPS1193 S01 26730 M 9:00-10:50(02) (R. Burwell)

1194 Sleep and Chronobiology Research (formerly PSYC 1060)
Part of a summer immersion in behavioral science research in human sleep and chronobiology. Instruction in human sleep and circadian rhythms, research techniques in basic physiology, laboratory skills, ethics of research, and basic CPR. Research seminars explore other techniques and career paths. Recommended prerequisite: CLPS 010 (PSYC 0010) is preferred; NEUR 0010 is also acceptable. Enrollment limited to 15.

This course is open only to students who have been selected to participate in the Sleep and Chronobiology Research Apprenticeship. To apply for the apprenticeship, please go to the following link for further information and dates: www.sleepforscience.org/academic/apprenticeship.php

CLPS 1194 has a commitment from May 30-August 25, 2011.

Sum CLPS1194 S01 60416 'To Be Arranged' (M. Carskadon)

1200 Thinking (formerly COGS 1520)
An investigation of conceptual structure, judgment, and inferential processes. The focus is on the relation between empirical evidence, theories, and models of cognitive process and structure. Prerequisite: CLPS 0200 (COGS 0420).

Fall CLPS1200 S01 15682 TTh 10:30-11:50(09) (S. Sloman)

1230 Seminar in Decision Making (formerly COGS 1860Y)
Spr CLPS1230 S01 26082 'To Be Arranged' (S. Sloman)

1241 Causal Reasoning (formerly COGS 1860C)
A review of research on how people make moral judgments. We will discuss and attempt to integrate diverse perspectives and research on cognition, action, and emotion from cognitive science, cognitive neuroscience, and philosophy. Enrollment limited to 40.

Spr CLPS1241 S01 26731 M 3:00-5:20(13) (D. Sobel)

1290 Laboratory in Cognitive Processes (formerly COGS 1530)
Presents the experimental way of thinking by pursuing several topics in an interactive computer-based laboratory. Students run experiments as a class and, by the end of the course, run their own experiment. Focus is on experimental design, procedure, analysis, and reporting. Topics

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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Spr CLPS1290 S01 25497 TTh 10:30-11:50(09) (S. Sloman)

1291 Computational Cognitive Science (formerly COGS 1280)
A detailed introduction to computational modeling of cognition, summarizing traditional approaches and providing experience with state-of-the-art methods. Covers pattern recognition approaches, shallow and hierarchical networks including 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 and prosodic word structure. Implications for language learning and language change are discussed. Prerequisite: CLPS 0030 (COGS 0410).

Fall CLPS1310 S01 16984 MWF 9:00-9:50(02)

1310 Introduction to Phonological Theory (formerly COGS 1210)
Examines some of the classical and current issues regarding sound structure in the world's languages and introduces the theoretical tools needed to solve them. After a brief introduction to articulatory phonetics and phonemic analysis, it focuses on phonological analysis of different languages, discussing segmental phonology, syllable structure, autoassociative representations, stress systems, and prosodic word structure. Implications for language learning and language change are discussed. Prerequisite: CLPS 0030 (COGS 0410).

Spr CLPS1320 S01 26866 MWF 11:00-11:50(04) (P. Lieberman)

1330 Introduction to Syntax (formerly COGS 1310)
An in-depth investigation of natural language syntax, an intricate yet highly organized human cognitive system. Focuses primarily on the syntax of English as a means of illustrating the structured nature of a grammatical system, but the broader question at issue is the nature of the rule system in natural language syntax. Prerequisite: CLPS 0030 (COGS 0410).

Spr CLPS1330 S01 25500 TTh 9:00-10:20(08) (L. Kertz)

1381 Topics in Phonetics and Phonology: Intonation Phonology
This course is an in-depth study of intonation—the manipulation of pitch and length to signify sentence-level meaning—English as well as other languages. This course will have two components, which will overlap considerably. In the laboratory skills component, you will learn how to collect, transcribe, measure, and analyze intonational data in Praat (a program for acoustic analysis), while in the theoretical component, you will read about and test the claims of various theories of intonation. With these skills, you will conduct independent research over the course of the semester. The course will also cover the interface between intonation and syntax/semantics, including the realization of focus in prosody.

Spr CLPS1381 S01 26937 "To Be Arranged"

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.

Spr CLPS1385 S01 26732 'To Be Arranged' (J. Morgan)

1389 Topics in Language Processing (formerly COGS 1840)
Enrollment limited to 40 sophomores, juniors and seniors. Prerequisites: CLPS 0800 or CLPS 1800 or CLPS 1820.

Spr CLPS1389 S01 25502 M 3:00-5:20(13) (L. Kertz)

1400 The Neural Bases of Cognition (formerly PSYC 1880)
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 topics related to animal models of human cognition. Students learn about 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 one animal model in one cognitive domain. Selected papers will emphasize learning, memory, and attention, but may also address other aspects of cognition, for example decision-making, or cognitive impairment associated with neuropathology or aging. Prerequisite: CLPS 0400 (COGS 0720), CLPS 0400 (PSYC 0470), or NEUR 0010; and CLPS 1190 (PSYC 1030), CLPS 1191 (PSYC 1450), CLPS 1192 (PSYC 1200), or NEUR 1600; or instructor permission. Enrollment limited to 20. Not open to first year students.

Fall CLPS1400 S01 15687 F 12:00-2:20(12) (R. Burwell)

1470 Mechanisms of Motivated Decision Making
How do we make decisions? This course considers the factors and mechanisms involved in motivated decision making, as informed by cognitive, neuroscientific, and computational modeling approaches. Readings will span a range of populations (e.g., healthy adults, adults with acquired brain damage, monkeys) and methods (e.g., behavioral, genetic, pharmacological and neuroimaging studies, electrophysiological recordings). Computational models will be prominently featured as a means for formalizing decision making theories across multiple levels of analysis, some focusing on high-level cognitive computations and others on neural mechanisms. Prerequisite: CLPS 0010, 0040, 1291, 1400, 1491, 1492, or NEUR 0010. Enrollment limited to 20. Not open to first year students.

Spr CLPS1470 S01 26867 'To Be Arranged' (M. Frank)

1480 Topics in Cognitive Neuroscience

1480B Cognitive Aging and Dementia (formerly PSYC 1830)
This seminar examines the cognitive changes associated with normal aging and age-related dementia (e.g., Alzheimer's Disease). Topics covered will include changes in the neurocognitive systems mediating memory, perception, and attention. The course is primarily intended as an advanced seminar for junior and senior concentrators in Psychology, but is also intended for other students interested in aging and the neuropsychology of cognition. Recommended prerequisites: An introductory course in cognitive neuroscience (CLPS 0040 (COGS 0720), CLPS 0400 (PSYC 0470)) or permission of the instructor. Preference will be given to senior concentrators in Psychology and related areas. Enrollment limited to 20.

Spr CLPS1480B S01 26733 TTh 2:30-3:50(11) (W. Heindel)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
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1491 Neural Modeling Laboratory (formerly COGS 1020)
Numerical simulations of cognitively oriented nervous system models. Discussion of parallel, distributed, associative models: construction, simulation, implications, and use. Prerequisites: MATH 0090, 0100, or equivalent; knowledge of a computer language; some background in neuroscience or cognitive science is helpful.

Spr CLPS1491 S01 25504 MWF 10:00-10:50(03) (J. Anderson)

1492 Laboratory in Computational Cognitive Neuroscience
(formerly COGS 1460)
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 0020 (COGS 0010) or CLPS 0200 (COGS 0420); and CLPS 0410 (PSYC 0750) or NEUR 0010.

Fall CLPS1492 S01 15689 TTh 10:30-11:50(09) (M. Frank)

1500 Ecological Approach to Perception and Action (formerly COGS 1380)
The ecological approach treats perceiving and acting as activities of agent-environment system rather than an isolated “mind,” and offers an alternative to the prevailing computational/representational view. Topics include inferential and direct perception, perception of the 3D environment, visual control of action, dynamics of motor coordination, and self-organization of behavior. Lecture and discussion. Prerequisite (any one of the following): CLPS 0010 (PSYC 0010), CLPS 0020 (COGS 0010), CLPS 0500 (COGS/PSYC 0440), or CLPS 0510 (COGS 0110).

Fall CLPS1500 S01 16986 TTh 2:30-3:50(11) (W. Warren)

1520 Computational Vision (formerly COGS 1200)
A detailed introduction to computational models of biological and machine vision summarizing traditional approaches and providing experience with state-of-the-art methods. Topics include low-level vision (color, motion, depth and texture), segmentation, face, object and scene recognition. Connections to contemporary research in computer vision and computational neuroscience will be emphasized highlighting how computational models may motivate the development of new hypothesis for experiment design in cognitive psychology.

Fall CLPS1520 S01 15690 TTh 1:00-2:20(10) (T. Serre)

1530 3D Shape Perception (formerly COGS 1860B)
Our ability to move in the environment, recognize and grasp objects, depends enormously on the capacity that the brain has in organizing the visual stimulation in the perceived 3D layout. 3D objects in the world project on the human retina flat images. How does the brain re-transform these flat images into a 3D representation? Enrollment limited to 40.

Spr CLPS1530 S01 26734 W 3:00-5:20(14) (F. Domini)

1580 Topics in Perception

1580A 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. This seminar will shed light on the behavioral and underlying neural mechanisms involved in integrating perception and cognitive processes, and converting them into action. We will also explore how visuo-motor behavior can provide a useful tool to study a wide range of conscious and unconscious cognitive processes including the current locus of attention, the nature of language representation, spatial representation of number, and high-level decision-making.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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reliability, predictive and construct validity. Students will design
research projects using these methods, collect and analyze data, give
oral presentations, and prepare a written report of their research.
Prerequisites: CLPS 0701 (PSYC 0300), and CLPS 0900
(PSYC/COGS 0090) or equivalent. Enrollment limited to 27.

Fall CLPS1790 S01 15695 TTh 1:00-2:20(10) (J. Wright)

1791 Laboratory in Social Cognition (formerly PSYC 1540)
Examines principles of experimental design and analysis in the context
of classic and contemporary research in social cognition. Students
replicate and extend several studies on topics such as person
perception, social stereotyping, or judgment and decision making.
Students will participate in the design of these studies, gather their own
data, analyze them, and report the findings in oral presentations and
written reports. Prerequisites: CLPS 0010 (PSYC 0010), CLPS 0700
(PSYC 0210), and CLPS 0900 (PSYC/COGS 0090). Enrollment limited to
27.
Spr CLPS1791 S01 26736 TTh 2:30-3:50(11) (J. Krueger)

1820 Language and the Brain (formerly COGS 1480)
This course will examine the neural systems underlying language
processing. Major focus will be on effects of brain injury on speaking
and understanding in left hemisphere-damaged patients who have
aphasia, right hemisphere-damaged patients, and split-brain patients.
Behavioral, electrophysiological and neuroimaging evidence will be
investigated.
Spr CLPS1820 S01 25508 MWF 10:00-10:50(03) (S. Blumstein)

1821 Neuroimaging and Language (formerly COGS 1840B)
Examines neuroimaging approaches to language processing including
fMRI, PET, TMS, and ERP. Consideration of the neural systems
underlying speaking and understanding. Topics include neural basis of
speech, lexical/semantic, and syntactic processing, mirror neurons and
language, multisensory integration, meanings of words, literacy, and
special populations. Recommended: either NEUR0010, CLPS 0020
(COGS0010) or CLPS 0800 (COGS0450) and one of the following:
CLPS 0040 (COGS0720), CLPS 0400 (PSYC0470), CLPS 0410
(PYSC0750), CLPS 1820 (COGS1480), CLPS 1822 (COGS1500),
NEUR1030, NEUR1660, or by permission.
Spr CLPS1821 S01 26686 MWF 12:00-12:50(05) (S. Blumstein)

1900 Senior Seminar in Cognitive Science (formerly COGS 1950)
Examines general philosophical and theoretical issues that cut across
cognitive science. Each student writes a substantial paper on a topic in
cognitive science. Required of cognitive science concentrators.
Enrollment limited to concentrators in the 7th semester or beyond, and,
by permission, to others who have significant course background in
cognitive science.
Spr CLPS1900 S01 25509 "To Be Arranged" (J. Anderson)

1970 Directed Reading in Cognitive, Linguistic and Psychological
Sciences (formerly COGS 1980)
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. Instructor’s permission required.
Fall; Spr

1980 Directed Research in Cognitive, Linguistic and
Psychological Sciences (formerly PSYC 1980)
Required of all ScB concentrators and Honors students in psychology.
Instructor permission required. S/N only. 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.
Fall; Spr

(Primarily for Graduates)

2000 Graduate Proseminar I (formerly COGS 2000)
Required of all graduate students in the cognitive science program.
Fall CLPS2000 S01 15697 Th 12:00-12:50(18) (L. Welch)

2001 Graduate Proseminar II
Open to graduate students only.

2091 Graduate First Year Project Research (formerly PSYC 2000)
Please check Banner for the correct section number and CRN to use
when registering for this course.
Fall

2092 Graduate First Year Project Research (formerly PSYC 2010)
Please check Banner for the correct section number and CRN to use
when registering for this course. Instructor permission required.
Spr

2095 Practicum in Teaching (formerly COGS/PSYC 2050)
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.
Fall; Spr

2096 Directed Graduate Research (formerly COGS 2980/2981,
PSYC 2930)
Instructor permission required.
Fall; Spr

2100 Core Topics in Animal and Comparative Behavior (formerly
PSYC 2070)
Fall CLPS2100 S01 16988 W 12:00-2:20(12) (R. Colwill)

2181 Advanced Topics in Animal and Human Learning (formerly
PSYC 2320B)
Topics vary from year to year, examples include theories of associative
learning, animal cognition, computational models of learning and
performance, and neurobiological models of basic associative
processes. Open to graduate students only.
Fall CLPS2181 S01 16899 W 1:00-3:50(06) (R. Church)

2200 Core Topics in Cognition (formerly COGS 2200A)
Spr CLPS2200 S01 26737 TTh 2:30-3:50(11) (K. Spoehr)

2510 Graduate Seminar in Vision (formerly PSYC 2100)
Selected topics in vision, including optics of the eye, anatomy of the
visual system, photochemistry of vision, psychophysics of color, acuity,
models of color vision, and light as a visual stimulus. Specific topics
vary.
Fall CLPS2510 S01 16990 "To Be Arranged" (L. Welch)

2700 Core Topics in Social Psychology (formerly PSYC 2200)
A survey of classic and contemporary research in social psychology,
including attitude formation and change, person and self perception,
stereotyping, and intergroup relations.
Fall CLPS2700 S01 16991 "To Be Arranged"

2906 Experimental Design (formerly PSYC 2060)
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.

For complete, up-to-date course information please see or the Brown Course Search tool
(https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
Linguistics

(Primarily for Undergraduates)

0030 Introduction to Linguistic Theory (CLPS 0030)
Interested students must register for CLPS 0030 S01 (CRN 15671).

0800 Language and the Mind (CLPS 0800)
Interested students must register for CLPS 0800 S01 (CRN 17103).

0810 The Biology and Evolution of Language (CLPS 0810)
Interested students must register for CLPS 0810 S01 (CRN 25493).

(For Undergraduates and Graduates)

1310 Introduction to Phonological Theory (CLPS 1310)
Interested students must register for CLPS 1310 S01 (CRN 16984).

1320 The Production, Perception, and Analysis of Speech (CLPS 1320)
Interested students must register for CLPS 1320 S01 (CRN 26866).

1330 Introduction to Syntax (CLPS 1330)
Interested students must register for CLPS 1330 S01 (CRN 25500).

1381 Topics in Phonetics and Phonology: Intonational Phonology (CLPS 1381)
Interested students must register for CLPS 1381 S01 (CRN 26937).

1385 Topics in Language Acquisition (CLPS 1385)
Interested students must register for CLPS 1385 S01 (CRN 26732).

1389 Topics in Language Processing (CLPS 1389)
Interested students must register for CLPS 1389 S01 (CRN 25502).

1650 Child Language Acquisition (CLPS 1650)
Interested students must register for CLPS 1650 S01 (CRN 26735).

1820 Language and the Brain (CLPS 1820)
Interested students must register for CLPS 1820 S01 (CRN 25508).

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Comparative Literature

(Primarily for Undergraduates)

0510 Literary Creation and Literary Discourse

0510B Caribbean Re-writes

Through close readings of canonical European texts and rewritings of them in the twelfth-century Caribbean, we explore the literary possibilities and political implications of writing the old in a new language. Readings include Columbus's diaries alongside Carpenter's The Harp and the Shadow (Cuba); Shakespeare's Tempest with that of Aimé Césaire (Martinique); and Jane Eyre and Wuthering Heights alongside novels by Jean Rhys (Dominica) and Maryse Condé (Guadeloupe).

Spr COLT0510B S01 26371 MWF 10:00-10:50(03) (E. Whitfield)

0510C The World of Lyric Poetry

Lyric poetry is the prime mode for conveying emotion in many cultures, from ancient times to the present day. This course will survey the variety of forms and themes from the earliest texts from Greece, Rome, China and Japan, then the glories of the Renaissance and the Tang Dynasty, then move to the challenges for lyric expression in the modern world. Enrollment limited to 20 first year students. FYS

Fall COLT0510C S01 16620 TTh 9:00-10:20(08) (D. Levy)

0510F Che Guevara, The Man and the Myths

We will read Guevara's political and philosophical writings alongside the literary, visual and filmic representations that have made him one of the twentieth century's most iconic figures and a symbol for vastly diverging interests. From a cultural studies perspective, we will compare the development of Guevara's theories to posthumous uses of his work and image, particularly in and in relation to present-day Cuba. Enrollment limited to 20 first year students. FYS

Spr COLT0510F S01 26372 MWF 1:00-1:50(06) (E. Whitfield)

0510I Virgil and Milton

We will read the Aeneid and Paradise Lost with interpretive patience. The study of fate, character, and poetics will be wedded to investigations of beauty, wonder, and nationhood. Enrollment limited to 20 first year students.

Spr COLT0510I S01 26372 MWF 1:00-1:50(06) (E. Whitfield)

0610 The Functions of Literature

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 inflected by issues of class, gender and race, and that the literary representation of these matters changes drastically over time. Texts from the Middle Ages to the present; authors drawn from Chrétien de Troyes, Quevedo, Prévost, Balzac, Broncí, Twain, Faulkner, Vesaas, Rhys, Satrapi and Foer. Enrollment limited to 20 first year students. FYS

Fall COLT0610D S01 14563 TTh 1:00-2:20(10) (A. Weinstein)

0610G Literature and the American Presidency

We shall read widely in writings by, and about, selected American presidents, but also focus on the ways in which presidents have used literature as a dictional source in their own writing and thinking. We will attend also to the relationship of culture to power as evidenced in other textual media, such as film. Enrollment limited to 20 first year students. FYS LILE

Sum COLT0610G S01 60277 MWF 9:00-11:40 (J. Pucci)

0610L Murder Ink: Narratives of Crime, Discovery, and Identity

Examines the narrative of detection, beginning with the great dramatic whodunit (and mystery of identity) Oedipus Rex. Literary texts which follow a trail of knowledge, whether to establish a fact (who killed Laius?) or reveal an identity (who is Oedipus?) follow in Sophocles' footsteps. We read Sophocles' intellectual children. Readings include: Hamlet, The Murders in the Rue Morgue, The Woman in White, and other classic novels and plays. We also analyze seminal films of the genre, including Laura and Vertigo. Will include the twentieth-century detective story, with particular attention to women writers and the genre of the female private eye.

Spr COLT0610L S01 26950 MWF 12:00-12:50(05) (M. Ierulli)

0610M The Israeli-Palestinian Conflict: Contested Narratives (UNIV 0980)

Interested students must register for UNIV 0980 S01 (CRN 26779).

0710 Literature and its History

0710A Women's Words: Writing in Medieval Europe and Japan

An introduction to women poets, dramatists, and prose writers from medieval court cultures, with an emphasis on what these authors show us about their educational, social, moral/spiritual environment and civilization. What did the pen or writing brush enable them to express and achieve? How were they able to negotiate the gaps between a male classical literary language and their own vernacular speech? Readings may include works by Christine de Pizan, Dhouda, Heloise, Hildegard of Bingen, Hrotsvitva, Julian of Norwich, Margery Kempe, Marie de France, Murasaki Shikibu, Sei Shonagon, and Trotula plus shorter texts written by both men and women. DVPS

Fall COLT0710A S01 16630 MWF 9:00-9:50(02) (M. Viswanathan)

0710V The Arab World Writes Itself: Contemporary Arabic Literature

In his seminal work Orientalism, Edward Said paraphrases Marx, and suggests that Orientalist attitudes towards the Middle East have produced a discourse in which the East must always be spoken for, and not allowed to represent itself. Said's argument has become even more relevant in the past decade, given the growing interest in the Middle East as a region in the US, coupled with a dearth of spaces where voices from the region can offer their own narratives. Designed as an introductory course to contemporary Arabic Literature, this course includes a variety of readings in translation and films from across the Arab world; it foregoes an intense exploration of one
national literature for a more varied survey of the textual output of several countries. We will attempt to situate each literature within its national context and within the larger pan-Arab, regional and international context while being sensitive to the political, geographical, and historical forces that have influenced these texts, including the rise of Arab nationalism and the independence struggles of the mid-twentieth century, and immigration. We will also examine—and hopefully question—some of the discursive themes and conceptual frames that have been traditionally used to think about contemporary Arabic literature. Enrollment limited to 20. LILE

Sum  COLT0710V  S01  60364  TTh 6:00-10:00 PM  (G. Hayek)

0810 Ideas, Myths, and Themes

0810G Equity: Law, Literature, and Philosophy
Justice, rigorously applied, yields injustice. This paradox has haunted Western aspirations toward legal and political justice from antiquity to the Renaissance. It necessitated the formulation of a complementary principle, equity, whose job it was to correct or supplement the law in cases where the strict application of it would lead to unfairness. We will read Sophocles, Shakespeare, Dickens, Kafka, and others.

Fall  COLT0810G  S01  16621  TTh 6:30-7:50(12)  (K. Haynes)

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  COLT0810O  S01  26373  TTh 9:00-10:20(08)  (A. Weinstein)

0810Z Myth and Literature
Authors throughout the ages have been fascinated by ancient mythology and have incorporated elements of it into their texts, often modifying commenting on or even destroying the original myth in the process. This course will investigate the values, dangers and limitations of myth-making/using in literature. Primary texts will include major works by Milton, Goethe, Kleist, Racine and Kafka. Texts will be supplemented by secondary readings and multimedia elements. Students will learn to question and engage critically with the historical, cultural, literary and scientific frontiers that separate myth and reality. Assignments will include two short papers and a final paper.

Sum  COLT0810Z  S01  60365  TTh 9:00-1:00(12)  (N. Peterson)

0811B Believers, Agnostics, and Atheists in Contemporary Fiction (JUDS 0050A)
Interested students must register for JUDS 0050A S01 (CRN 14060).

0811D The Bible as Literature (JUDS 0260)
Interested students must register for JUDS 0260 S01 (CRN 16698).

(For Undergraduates and Graduates)

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; final exam.

Fall  COLT1210  S01  13220  MWF 1:00-1:50(06)  (S. Bernstein)

1410 Studies in Drama
We will read a number of Shakespeare's plays from The Comedy of Errors to The Winter's Tale in relation to the sources, analogues, and genres (classical, continental and English) on which he drew. We will consider both formal and historical questions. Issues to be addressed include genre, the Shakespearean text, gender, sexuality, status, degree, and nation. Some attention to what has come to be called "global" Shakespeare. Written work to include a mid-term and two papers.

Spr  COLT1410P  S01  25832  TTh 10:30-11:50(09)  (K. Newman)

1410R Hamlet: Translation, Adaptation, Appropriation
Shakespeare’s Hamlet is perhaps the most widely read, performed, adapted, parodied and imitated literary text of the western tradition. In this course we will begin by reading/re-reading the play before going on to consider a number of appropriations of Shakespeare, both in the west and non-west, in order to address social and aesthetic issues including questions of meaning and interpretation, intertextuality and cultural relativism. Prerequisite: Previous study of Shakespeare. Enrollment limited to 20. Instructor permission required.

Fall  COLT1410R  S01  16631  M 3:00-5:20(13)  (K. Newman)

1410S Classical Tragedy
This course will read the great Greek tragedies of Aeschylus, Sophocles, and Euripides, and some Senecan tragedy. We will then read Renaissance and later tragedies that use the classical world as a setting, such as Antony and Cleopatra, Julius Caesar, and tragedies that rewrite classical themes, including O'Neill's Mourning Becomes Electra.

Fall  COLT1410S  S01  17191  MWF 10:00-10:50(03)  (M. Ierulli)

1410T Tragedy from Sophocles to The Wire
Explores tragedy from Athens to Baltimore. Readings will include Sophocles, Shakespeare, Hegel, Chekov, Jia Zhangke, Chan-Wook Park, Marx, Trotsky, and the deindustrialized American city. Open to juniors and seniors. Instructor permission required.

Spr  COLT1410T  S01  26381  MWF 2:00-2:50(07)  (P. Saval)

1420 Studies in Narrative

1420B A Mirror for the Romantic: The Tale of Genji and The Story of the Stone
In East Asian Buddhist culture, the mirror is a symbol of the mind in both its intellectual and emotional aspects. These masterworks detail the lives and loves of Prince Genji, cynosure of the medieval Japanese court, and Jia Baoyu, the last hope of an influential Chinese clan during the reign of Manchus. We examine both works as well as the sources of Genji and literary aesthetics of the Tang dynasty. Prerequisites: CO 71, RS 83 or 88, or permission of the instructor.

Fall  COLT1420B  S01  16622  TTh 2:30-3:50(11)  (D. Levy)

1420O Proust, Joyce and Faulkner
A reading of three major Modernist authors, with a focus on the following issues: role of the artist, representation of consciousness, weight of the past. Texts include substantial portions of Proust's Recherche, Joyce's Portrait and Ulysses, Faulkner's Sound and the Fury, Light in August and Absalom, Absalom! Prior background in these authors desirable, especially Ulysses. Senior seminar. Reserved for: Seniors. Preference given to concentrators in Comparative Literature, English, Modern Culture and Media. Instructor's permission required.

Spr  COLT1420O  S01  26374  TTh 1:00-2:20(10)  (A. Weinstein)

1420T The Fiction of Relationship
Explores the manifold ways in which narrative literature sheds light on the relationships that we have in life, both knowingly and unknowingly. The novel form, with its possibilities of multiple voices and perspectives, captures the interplay between self and other that marks all lives. Authors include Laclos, Melville, Brontë, Kafka, Woolf, Faulkner, Borges, Burroughs, Vesaas, Morrison, and Coetzee.
1420X The European Novel From Goethe to Proust
Readings of major European novels of the 19th century as literary reflections on philosophical questions such as aesthetic and ethical judgment, subjectivity, mimesis, memory and the novel itself as a genre. Authors include Goethe, Stendhal, Balzac, Dickens, Flaubert and Proust. Selections from Kant, Hegel, Marx, Lukács and Benjamin.
Spr COLT1420X S01 25323 MWF 11:00-11:50(04) (K. McLaughlin)

1420Y Gigantic Fictions
What is the relation between literary gigantism and mimesis? How do ‘gigantic fictions’ threaten to break their literary bounds? What holds these mammoth narratives together? We will address these questions and others through a close reading of three works: Murasaki Shikibu's *The Tale of Genji*, Tolstoy's *War and Peace* and James Joyce's *Ulysses*.
Spr COLT1420Y S01 26376 TTh 2:30-3:50(11) (M. Viswanathan)

1421O W. G. Sebald and Some Interlocutors (ENGL 1761Q)
Interested students must register for ENGL 1761Q S01 (CRN 26515).

1421Q Word and Image: *Ekphrasis*, the Iconic Narrative, and the Graphic Novel
An examination of the tradition of illustrated narratives from the pre-modern to the modern periods: the ancient Indian epic the *Ramayana*, the early eleventh-century Japanese *Genji Monogatari*, the medieval English *Canterbury Tales*, the late eighteenth century *Marriage of Heaven and Hell*, as well as the contemporary graphic novel *Persepolis* and examples of Japanese manga. Discussion will focus on the nature of iconography and symbolism; the historical privileging of text over image; the significance of parallel visual and verbal representation and its implications for culturally-specific theories of reading.
Fall COLT1421Q S01 16632 MWF 12:00-12:50(12) (M. Viswanathan)

1421R The European Novel from Richardson to Goethe
This course studies the rise of the novel in eighteenth-century England, France, and Germany, focusing on the development of epistolary fiction, but with side-glances at the picaresque and sentimental tradition. Texts to be read include Richardson's *Pamela*, Fielding's *Shamela* and *Joseph Andrews*, Rousseau's *Julie*, Laclos's *Les Liaisons dangereuses*, perhaps Bernardin de Saint-Pierre's *Paul et Virginie*, perhaps Sade's *Justine*, and defnitely Goethe's *Sorrows of Young Werther*. LILE
Fall COLT1421R S01 16633 MWF 2:00-2:50(07) (M. Redfield)

1430 Studies in Poetry

1430K The Classical Tradition in English Poetry
We will read a number of famous short poems from antiquity in conjunction with the major English writers who later translated, imitated, and reworked them. We will pay special attention to the question of creative innovation. We will read Horace, Theocritus, Virgil, Dryden, Pope, and Tennyson, and others.
Fall COLT1430K S01 16624 TTh 10:30-11:50(09) (K. Haynes)

1430L Voices of Romanticism
Readings of lyric poetry in the European Romantic tradition. Focus on problems of lyric subjectivity and representation, and the rhetoric of "voice." Emphasis on formal features of poetry. The course will be based on close reading and frequent writing assignments. Readings from Wordsworth, Shelley, Keats, Goethe, Novalis, Hugo, Nerval, Lamartine, Baudelaire and others. Knowledge of French or German required, or by permission.
Fall COLT1430L S01 16625 MWF 11:00-11:50(04) (S. Bernstein)

1430T Leaves of Words: Japanese Poetry and Poetics
A historical study of various forms of *waka* (Japanese poetry) from the 8th century anthology the *Man'yoshu* to the advent of modern verse in the latter part of the 19th century. We will examine the significance and functions of poetry historically as well as the relationship of poetry to religion and society, the political implications of *waka*, and the dominant aesthetic governing poetic conventions in different periods.
Spr COLT1430T S01 25326 TTh 6:30-7:50(12) (M. Viswanathan)

1430U Measures of Poetry: A Workshop
Rhythm, intonation and their written forms measure poetic matter. This workshop introduces prosody through exercises in theory and practice: the line; metrical and stanzaic form; rhyme; music and performance; free verse; language writing; and the task of translation (form). Even monkeys, Darwin wrote, express strong feelings in different tones. Enrollment limited to 20.
Spr COLT1430U S01 26382 W 3:00-5:20(14) (S. Foley)

1710B Advanced Translation (LITR 1010F)
Interested students must register for LITR 1010F S01 (CRN 23832).

1810 Studies in the Literature of Ideas

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. Novels by Grass, Doctorow, Delillo, García-Márquez, Allende, Cristina García and Lídia Jorge. Theoretical texts by White, LaCapra, Benjamin, Ricoeur, and Chartier. Films to be discussed include *The Official Story* and *Europa, Europa*. Prerequisite: two previous literature courses. Enrollment limited to 30. Instructor's permission required.
Spr COLT1810G S01 26378 W 3:00-5:20(14) (L. Valente)

1810H Tales of Two Cities: Havana - Miami, San Juan - New York
Compares representations of Havana and San Juan in contemporary fiction and film to literary inscriptions of Cuban Miami and Puerto Rican New York. Explores mapping the city as mapping identity, and city-writing as reconstruction and creation. Views cities through the eyes of children, tourists, and urban detectives; authors include Antonio José Ponte, Roberto G. Fernández, Mayra Santos Febres and Ernesto Quiñones. DVPS LILE
Fall COLT1810H S01 16626 TTh 1:00-2:20(10) (E. Whitfield)

1810I Gates of Asia
An exploration of the growth of European knowledge of Asia from the rise of the Mongol empire through the Great Game and its aftermath. Primary sources include three kinds of accounts provided by travelers who set their hearts on Asian exploration: personal narratives, official reports and dispatches, and scholarly studies of the exotic cultures. Enrollment limited to 20.
Spr COLT1810I S01 26379 M 3:00-5:20(13) (D. Levy)

1810V Marx and Modern Literature
A contrastive and integrative study of the range of Marx's writings and works by writers such as Shakespeare, Dickens, Baudelaire, Flaubert, Woolf, and Stevens. Examines Marx's leading concepts in philosophy, history, economics, ideology, and aesthetics in relation to the particularities of literary forms. One or two short papers and a longer final study of a literary work chosen from the student's major field. Enrollment limited to 30.
Fall COLT1810V S01 16627 Th 4:00-6:20(13) (E. Ahearn)
Fall; Spr

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's permission required.
Fall; Spr

1990 Senior Thesis Preparation
Special work or preparation of honors theses under the supervision of a member of the staff. Open to honors students and to others. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.
Fall; Spr

(Primarily for Graduates)

2650 Theory of Literature

2650D Theory of Comparative Literature
Designed to introduce students to some of the central theoretical issues that define the discipline of Comparative Literature through the study of twelve central texts in the field. We will begin with Erich Auerbach's foundational text *Mimesis*, and end with Gayatri Spivak's *Death of a Discipline*. In between the authors to be read and analyzed will be Bakhtin, Lukacs, Barthes, Derrida, DeMan, Jameson, Greenblatt and others. Open to graduate students, and to undergraduates by permission of the instructor.
Fall COLT2650D S01 16628 M 3:00-5:20(13) (S. Stewart-Steinberg)

2820 Special Topics in Comparative Literature

2820F Latin America and Theory
Explores the engagement of Latin American literature and criticism with non-Latin American bodies of literary and cultural theory (including poststructuralism, postcolonialism, postmodernism and cultural studies), addressing tensions between the autochthonous production of theoretical frameworks and their import from other contexts. Readings include the Latin American Subaltern Studies group, *Revista de Crítica Cultural*, Rama, Garcia Canclini, Sarlo, Richard and current new media theorists. Open to graduate students and qualified seniors.
Fall COLT2820F S01 16629 W 3:00-5:20(14) (E. Whitfield)

2820L Moderns and Primitives
Major writers of European Modernism, including Eliot, Joyce, Pound, Rilke, put a new emphasis on the status of primitive society and archaic pre-history. We will read their works with reference to the anthropology and ethnography of their period, and we will consider the controversies that have surrounded modernist primitivism.
Spr COLT2820L S01 26380 Th 4:00-6:20(16) (K. Haynes)

2820W Ethical Turns (ENGL 2900N)
Interested students must register for ENGL 2900N S01 (CRN 16830).

2830 Special Problems in Comparative Literature

2830I Histories of the Early Modern Body
This seminar considers the production of knowledge about the body in the early modern period. The institution of science and how the emerging "science" of the body was visualized; discourses of the erotic, the scientific and the religious; the body in varied cultural performances including the blason, devotional texts, erotica, drama etc. Texts include theoretical work on gender and sexuality. Open to graduate students only.
Spr COLT2830I S01 26932 W 3:00-5:20(14) (K. Newman)

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's permission required.

Fall; Spr

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 COLT2990 S01 11047 'To Be Arranged'
Spr COLT2990 S01 20777 'To Be Arranged'

Computer Science

(Primarily for Undergraduates)

0040 Introduction to Scientific Computing and Problem Solving
An introduction to computer programming and software design in a high-level language. Emphasizes fundamental techniques and strategies for solving scientific problems with computers. Illustrates abstract concepts with a wide range of exemplary applications from engineering, the sciences, and the humanities. Intended for students who want a single application-oriented programming course. This course is not intended for computer science concentrators. No prerequisites. Students MUST register for a lab, and a lecture section.
Spr CSCI0040 S01 20370 TTh 2:30-3:50(11)

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*, helps provide a serious introduction to the field intended for both potential concentrators and those who may take only a single course. No prerequisites. Students MUST register for a lab, and a lecture section.
Fall CSCI0150 S01 10488 TTh 2:30-3:50(11) (A. van Dam)

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.
Spr CSCI0160 S01 20371 TTh 10:30-11:50(09) (D. Laidlaw)

0170 Computer Science: An Integrated Introduction
CSCI0170/0180 is an introductory sequence that helps students begin to develop the skills, knowledge, and confidence to solve computational problems elegantly, correctly, efficiently, and with ease. The sequence is unique in teaching both the functional and imperative programming paradigms—the first through the languages Scheme and ML in CSCI0170; the second through Java in CSCI0180. The sequence requires no previous programming experience. Indeed, few

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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.

Fall CSCI0170 S01 10489 MWF 11:00-11:50(04) (C. Kenyon)

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.

Spr CSCI0180 S01 20372 MWF 11:00-11:50(04) (U. Cetintemel)

0190 Programming with Data Structures and Algorithms
This course is a one-semester introduction to computer science for students with strong prior computer science background. It covers core data structures, algorithms, and analysis techniques similar to those of the two-course introductory sequences (CSCI 0150-0160 and CSCI 0170-0180), integrated with programming. Prerequisite: score of 5 on the AP Computer Science A exam, equivalent knowledge of Java and data structures, or permission of the instructor.

Fall CSCI0190 S01 10503 MWF 11:00-11:50(04) (S. Krishnamurthi)

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.

Spr CSCI0220 S01 20373 TTh 1:00-2:20(10)

0310 Introduction to Computer Systems
Basic principles of computer organization. Begins with machine representation of data types and logic design, then explores architecture and operations of computer systems, including I/O, pipelining, and memory hierarchies. Uses assembly language as an intermediate abstraction to study introductory operating system and compiler concepts. Prerequisite: CSCI 0150 or CSCI 0180 or CSCI 0190.

Fall CSCI0310 S01 10490 MWF 2:00-2:50(07) (P. van Hentenryck)

0320 Introduction to Software Engineering
Advanced programming techniques including Java, threads, web-applications, user interfaces and XML. Covers software design including object-oriented design, systems design, web application design and user interface design. Software engineering including modeling, analysis, testing, debugger reuse, the software lifecycle, tools and project management. Prerequisite: CSCI 0160, CSCI 0180 or CSCI 0190. CSCI 0220 is recommended.

Spr CSCI0320 S01 20374 TTh 2:30-3:50(11)

0510 Models 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.

Fall CSCI0510 S01 10491 MWF 11:00-11:50(04) (J. Savage)

0530 Directions: The Matrix in Computer Science
The aim of this course is to provide students interested in computer science an introduction to vectors and matrices and their use in modeling and data analysis. Students will study (1) concepts and proofs in linear algebra, (2) data-analysis techniques such as principal component analysis, latent semantic indexing, and linear regression, and (3) applications of these techniques to computer science. Example applications: transformation of shapes, detecting faces in images, error-correcting codes, factoring integers, categorizing new stories, and Google's method for ranking web pages. This course satisfies the linear algebra requirement for the Computer Science Sc.B. Prerequisites: No formal prerequisites, but students are expected to be comfortable with mathematics and with computing.

Fall CSCI0530 S01 13558 TTh 1:00-2:20(10) (P. Klein)

0931 Introduction to Computation for the Humanities and Social Sciences
Introduces students to the use of computation for solving problems in the social sciences and the humanities. We will investigate a series of real-world problems taken from the news, from books such as Freakonomics, and from current research. Topics covered include data gathering, data analysis, web-based interfaces, security, algorithms, and scripting. Enrollment limited to 20. LILE

Fall CSCI0931 S01 14513 TTh 2:30-3:50(11) (S. Reiss)

(For Undergraduates and Graduates)

1230 Introduction to Computer Graphics
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; and CSCI 0530 or MATH 0520 (may be taken concurrently). CSCI 0320 is strongly recommended. Students who don't know C++ should take the minicourse offered during the first week of the semester.

Fall CSCI1230 S01 10492 TTh 10:30-11:50(09) (A. van Dam)

1250 Introduction to Computer Animation
Introduction to 3D computer animation production including story writing, production planning, modeling, shading, animation, lighting, and compositing. Students work independently to learn basic skills, then in groups to create a polished short animation. Emphasis is on in-class critique of ongoing work, which is essential for learning the cycle of evaluating work, determining improvements, and implementing them for further evaluation. Students should attend first class to receive instructor's written permission. Enrollment Limited to 20.

Fall CSCI1250 S01 10493 MW 12:00-1:50(12) (B. Meier)

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. Recommended: CSCI 0220 and 0310.
Fall CSCI1270 S01 10494 M 3:00-5:20(13) (S. Zdonik)

**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. Enrollment Limited to 20.

Spr CSCI1280 S01 24427 MW 12:00-1:50(05) (B. Meier)

**1290 Computational Photography**
Describes the convergence of computer graphics and computer vision with photography. Its goal is to overcome the limitations of traditional photography using computational techniques to enhance the way we capture, manipulate, and interact with visual media. Topics covered: cameras, human visual perception, image processing and manipulation, image based lighting and rendering, high dynamic range, single view reconstruction, photo quality assessment, non photorealistic rendering, the use of Internet-scale data, and more. Students are encouraged to capture and process their own data. Prerequisites: previous programming experience, basic linear algebra, calculus, and probability; previous knowledge of computer graphics or computer vision. Strongly recommended: CSCI 1230, CSCI 1430, ENGN 1810.

Spr CSCI1290 S01 25854 MW 11:00-11:50(04) (J. Hays)

**1320 Creating Modern Web Applications**
Covers all aspects of web application development, including the initial concept, user-centric design, development methodologies, front end development, databases, back end development, security, testing, load testing, accessibility, and deployment. There will be a substantial team project. The course is open to all students but a background in either programming, design, or HTML and Javascript development will be helpful.

Fall CSCI1320 S01 16858 MWF 1:00-1:50(06) (S. Reiss)

**1380 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.

Spr CSCI1380 S01 23195 TTh 2:30-3:50(11) (T. Doeppner)

**1410 Introduction to Artificial Intelligence**
Theoretical and practical approaches to designing intelligent systems. Example tasks range from game playing to hardware verification. Core topics include knowledge representation, search and optimization, and automated reasoning. Application areas include natural language processing, machine vision, machine learning, and robotics. Strongly recommended: CSCI 0160, CSCI 0180 or CSCI 0190, and CSCI 0220.

Spr CSCI1410 S01 26712 TTh 10:30-11:50(09) (A. Greenwald)

**1460 Introduction to Computational Linguistics**
Introduction to computational linguistics (also known as natural-language processing) including the related mathematics and several programming projects. Particular topics include: language modeling (as used in e.g., speech recognition, machine translation), machine translation, part-of-speech labeling, syntactic parsing, and pronoun resolution. Mathematical techniques include basic probability, noisy channel models, the EM (Expectation-Maximization) algorithm, hidden Markov models, probabilistic context-free grammars, and the forward-backward algorithm. Prerequisites: CSCI 1410 or instructor permission, which will be given to all students with a solid background in programming and either basic probability, or enough mathematical background to quickly absorb the latter. Not open to first year students.

Fall CSCI1460 S01 24920 MWF 1:00-1:50(06) (E. Charniak)

**1480 Building Intelligent Robots**
How do robots function autonomously in dynamic, unpredictable environments? This course focuses on programming mobile robots, such as the iRobot Roomba, to perceive and act autonomously in real-world environments. The major paradigms for autonomous control and robot perception are examined and compared with robotic notions in science fiction. Prerequisite: CSCI 0150, CSCI 0170 or CSCI 0190. Recommended: CSCI 1410 or CSCI 1230.

Fall CSCI1480 S01 14281 MWF 1:00-1:50(06) (O. Jenkins)

**1550 Probabilistic Methods in Computer Science**
Introduction to the applications of probability theory in computer science, in particular to randomized algorithms and probabilistic analysis of algorithms. Introduces basic probability theory and presents applications of randomized and probabilistic analysis techniques in areas such as graph algorithms, data structures, communication, and Monte Carlo simulations. No prior knowledge of probability theory is assumed. Prerequisite: CSCI 0220 or equivalent. CSCI 1570 recommended but not required.

Fall CSCI1550 S01 13106 TTh 1:00-2:20(10) (E. Upfal)

**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 numerical computing, hashing, searching, dynamic programming, graph algorithms, network flow, and string parsing and matching. Prerequisites: CSCI 0160, CSCI 0180, or CSCI 0190, and CSCI 0220.

Spr CSCI1570 S01 26619 TTh 10:30-11:50(09) (C. Kenyon)

**1660 Introduction to Computer Systems Security**
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 (trosans, viruses, and worms), access control (users, roles, policies), and enabling middleware technologies. Topics include basic probability, noisy channel models, the EM algorithm, hidden Markov models, probabilistic context-free grammars, and the forward-backward algorithm. Prerequisites: CSCI 0160, CSCI 0180 or CSCI 0190.

Spr CSCI1660 S01 20376 TTh 1:00-2:20(10) (R. Tamassia)

**1670 Operating Systems**
The basic principles of operating systems. Part I: fundamental concepts including: multithreaded programming and concurrency, dynamic storage allocation and liberation, linkers and loaders, file systems, and virtual memory. Covers actual systems including Solaris, Linux, and Windows. Part II: operating-system support for distributed systems, including computer communication protocols, remote procedure call protocols, computer security, and distributed file systems. Prerequisite: CSCI 0320 or CSCI 0360.

Fall CSCI1670 S01 10497 MWF 2:00-2:50(07) (T. Doeppner)

**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 0320, CSCI 0360, or consent of instructor.

Spr CSCI1680 S01 23502 TTh 10:30-11:50(09) (R. Fonseca)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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1690 Operating System 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.

Fall CSCI1690 S01 10498 T 8:00-9:50 PM(18) (T. Doeppeiner)

1730 Introduction to Programming Languages
Examines 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, CSCI 0310 and CSCI 0510, or instructor's permission.

Fall CSCI1730 S01 15862 MWF 10:00-10:50(03) (S. Saini)

1760 Introduction to 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.

Fall CSCI1760 S01 16861 TTh 2:30-3:50(11) (M. Herlihy)

1810 Computational Molecular Biology
Processing molecular biology data (DNA, RNA, proteins) has become central to biological research and a challenge for science research. Important objectives are molecular sequence analysis, recognition of genes and regulatory elements, molecular evolution, protein structure, comparative genomics. This course models the underlying biology in the terms of computer science and presents the most significant algorithms of molecular computational biology. Prerequisites: CSCI 0160, CSCI 0180 or CSCI 0190, and CSCI 0220, or consent of instructor.

Fall CSCI1810 S01 10500 TTh 1:00-2:20(10)

1900 Software System Design
Students identify, design, and implement significant software applications and learn and practice techniques of project management, requirements, specification, analysis, design, coding, documentation, testing, maintenance, and communication. Prerequisite: CSCI 0320.

Spr CSCI1900 S01 26620 MWF 10:00-10:50(03) (S. Reiss)

1950 Special Topics in Computer Science
Specific topics to be determined at the beginning of each semester.

1950F Introduction to Machine Learning
How can artificial systems learn from examples, and discover information buried in massive datasets? This course explores the theory and practice of statistical machine learning. Topics include parameter estimation, probabilistic graphical models, approximate inference, and kernel and nonparametric methods. Applications to regression, categorization, and clustering problems are illustrated by examples from vision, language, communications, and bioinformatics. Prerequisites: CSCI 0160, 0180, or 0190, and comfort with basic probability, linear algebra, and calculus.

Spr CSCI1950F S01 25696 TTh 1:00-2:20(10) (E. Sudderth)

1950L Algorithmic Foundations of Computational Biology
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 CSCI1950L S01 20378 TTh 2:30-3:50(11) (S. Istrail)

1950P Cybersecurity and International Relations
In this course we provide an introduction to the technologies of the Internet, computers, and databases that is sufficient to understand the policy issues that arise in cyberspace. The policy issues explored concern security and stability of the Internet, protection of privacy via proxies, anonymizers and encryption, cyber conflict and deterrence, and measures designed encourage the peaceful use of cyberspace.

Spr CSCI1950P S01 26304 W 3:00-5:20(14) (J. Savage)

1970 Individual Independent Study
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.

Fall; Spr (Primarily for Graduates)

2270 Topics in Database Management
In-depth treatment of advanced issues in database management systems. Topics vary from year to year and may include distributed databases, mobile data management, data stream processing and web-based data management. Prerequisite: CSCI 1270.

Spr CSCI2270 S01 25703 M 3:00-5:20(13) (S. Zdonik)

2370 Interdisciplinary Scientific Visualization
The solution of scientific problems using computer graphics and visualization. Working in small multidisciplinary groups, students identify scientific problems, propose solutions involving computational modeling and visualization, design and implement the solutions, apply them to the problems, and evaluate their success. Examples include interactive software systems, immersive CAVE applications, or new applications of existing visualization methods. Prerequisites: all: programming experience; CS students: graphics experience; others: problem ideas. Instructor permission required.

Fall CSCI2370 S01 16000 TTh 1:00-2:20(10) (D. Laidlaw)

2580 Solving Hard Problems in Combinatorial Optimization: Theory and Systems
The theory of combinatorial optimization and how it is embodied in practical systems. Explores issues encountered in implementing such systems. Emphasizes the wide variety of techniques and methodologies available, including integer programming, local search, constraint programming, and approximation algorithms. Problems addressed may include: scheduling, coloring, traveling salesman tours, and resource allocation. Prerequisites: CSCI 0320 and basic knowledge of linear algebra.

Spr CSCI2580 S01 26033 M 1:00-3:20(06) (P. van Hentenryck)

2750 Topics in Parallel and Distributed Computing
CSCI 2750 is a graduate seminar that will consider an advanced topic (to be determined) in distributed computing. May be repeated for credit.

Spr CSCI2750 S01 26621 TTh 1:00-2:20(10) (M. Herlihy)

2890 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 CSCI2890 S01 11067 "To Be Arranged"

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
2950 Special Topics in Computer Science

2950C Topics in Computational Biology
This course will investigate active and emerging research areas in computational biology. Topics include cancer genomics; genome rearrangements and assembly; protein and regulatory interaction networks. The course will be a mixture of lectures and student presentations of recent conferences and journal papers.

Fall CSI2950C S01 10504 TTh 10:30-11:50(09) (R. Raphael)

2950K Special Topics in Computational Linguistics
Every year will cover a different topic in computational linguistics, from a statistical point of view, including parsing, machine translation, conference, summarization, etc. Prerequisites: CSCI 1460 or permission of the instructor.

Fall CSI2950K S01 14511 MWF 3:00-3:50(13) (E. Charniak)

2950L Medical Bioinformatics: Disease Associations, Protein Folding and Immunogenomics
Devoted to computational problems and methods in the emerging field of Medical Bioinformatics where genomics, computational biology and bioinformatics impact medical research. We will present challenging problems and solutions in three areas: Disease Associations, Protein Folding and Immunogenomics. This course is open to graduate students and advanced undergraduates with Computational or Life Science backgrounds. Prior background in Biology is not required.

Fall CSI2950L S01 10501 TTh 2:30-3:50(11) (S. Istrail)

2950P Special Topics in Machine Learning
This seminar course explores current research topics in statistical machine learning. Focus varies by year, and may include Bayesian nonparametrics; models for spatial, temporal, or structured data; and variational or Monte Carlo approximations. Course meetings combine lectures with presentation and discussion of classical and contemporary research papers. Students will apply some this material to a project, ideally drawn from their own research interests.

Fall CSI2950P S01 16862 TTh 2:30-3:50(11) (E. Sudderth)

2950R Special Topics in Advanced Algorithms
We will study an advanced topic in the design and analysis of algorithms. Prerequisite: CSCI 1570 or the equivalent.

Spr CSI2950R S01 24714 TTh 2:30-3:50(11) (P. Klein)

2950T Topics in Distributed Databases and Systems
This course explores data and resource management issues that arise in the design, implementation, and deployment of distributed computing systems by covering the state of the art in research and industry. Typical topics include cloud computing and sensor networks. Recommended: CSCI 0320 or equivalent.

Fall CSI2950T S01 10502 W 3:00-5:20(14) (U. Cetintemel)

2950U Special Topics on Networking and Distributed Systems
Explores current research topics in networking, distributed and operating systems. Specific topics may include wireless and sensor networking, Internet-scale distributed systems, cloud computing, as well as the core problems, concepts, and techniques underlying these systems. The course has two components: reading and discussion of current and classical research papers, and a research project related to the topic but ideally drawn from students’ own research interests. This is a graduate-level course, undergrads can join with the consent of the instructor.

Fall CSI2950U S01 14514 TTh 1:00-2:20(10) (R. Fonseca)

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.

Fall Spr

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 Spr

Fall XLIST Courses of Interest to Concentrators in Computer Science
The following courses may be of interest to students concentrating in Computer Science. Please check with the sponsoring department for times and locations.

Engineering
ENGN 2911X Reconfigurable Computing: Accelerate Your Algorithms

Center for Race and Ethnicity

Ethnic Studies

(Primarily for Undergraduates)

0500 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. Instructor permission required.

Fall ETHN0500 S01 14249 MWF 10:00-10:50(03) (R. Rodriguez)

1900 Topics in Ethnic Studies

0790A Latina/o Literature
This course will introduce students to a broad array of Latina/o literature- fiction, poetry, drama, and graphic novels. While there is a long tradition of Latina/o literature in the United States, we will focus primarily on a period from 1970 to the present. Aimed to familiarize students with debates in the field, the readings will also include critical essays. Enrollment limited to 20.

Fall ETHN0790A S01 16884 MWF 1:00-1:50(06) (R. Rodriguez)

(For Undergraduates and Graduates)

1900 Senior Seminar in Ethnic Studies
Seminar for senior ethnic studies concentrators. Exposes students to critical issues in the study of race and ethnicity. Students are encouraged to develop a major essay or thesis on race and ethnicity. Enrollment limited to 20.

1900H What is Ethnic Studies?
Enrollment limited to 20 seniors and graduate students.

Spr ETHN1900H S01 26152 W 3:00-5:20(14) (E. Hu-Dehart)

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.

Fall
Development Studies

1920 Senior Thesis
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Fall; Spr

Haitian Creole see Latin American and Caribbean Studies

Czech see Slavic Languages

Development Studies

(For Undergraduates and Graduates)

1000 Seminar in Development Studies
Interested students must register for SOC 1871D S01 (CRN 24338).

1500 Methods in Development Research
An introduction to the various techniques of research in Development Studies, with a focus on qualitative and field methods. Open to all Development Studies concentrators. Enrollment limited to 20. Spr DEVL1500 S01 23610 T 4:00-6:20(16) (C. Ban)

1980 Thesis Writing in 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. Fall DEV1980 S01 10505 T 4:00-6:20(13) (C. Ban) Fall DEV1980 S02 14366 W 3:00-5:20(14) (C. Ban)

1990 Senior Thesis Preparation
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Reserved for Development Studies seniors. Instructor’s permission required. Fall; Spr

(Primarily for Graduates)

2000 Theory and Research in Development I
Explores a range of substantive debates in development by drawing on empirical and theoretical work from the disciplines of economics, political science, sociology and anthropology. The course aims to provide students with a broad understanding of current debates and research on development, evaluate both the differences and complementarities in disciplinary perspectives and develop a toolkit of interdisciplinary analytic skills that can be applied to concrete research questions. Instructor’s permission required. Fall DEV2000 S01 10507 W 9:00-11:50(02) (P. Heller)

2010 Theory and Research in Development II
Explores a range of substantive debates in development by drawing on empirical and theoretical work from the disciplines of economics, political science, sociology and anthropology. The course aims to provide students with a broad understanding of current debates and research on development, evaluate both the differences and complementarities in disciplinary perspectives and develop a toolkit of interdisciplinary analytic skills that can be applied to concrete research questions. Instructor’s permission required.

Spr DEV2100 S01 20384 Th 10:00-12:20(09) (R. Snyder)

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 10508 ‘To Be Arranged’ Spr DEVL2990 S01 20385 ‘To Be Arranged’

Fall XLIST Courses of Interest to Concentrators in Development Studies
The following courses may be of interest to Development Studies concentrators. Please see the sponsoring department for the time and location of each course.

Africana Studies
AFRI 0210 Blacks in Latin American History and Society
AFRI 1210 Afro-Brazilians and the Brazilian Polity

Anthropology
ANTH 0300 Culture and Health
ANTH 1233 Ethnographies of Global Connection

BioMed-Community Health
PHP 1070 The Burden of Disease in Developing Countries

Economics
ECON 1110 Intermediate Microeconomics
ECON 1210 Intermediate Macroeconomics

Education
EDUC 1110 Introductory Statistics for Education Research and Policy Analysis

Engineering
ENGN 1930Q Social Entrepreneurship

English
ENGL 0610E Postcolonial Literature

Environmental Studies
ENVS 0510 International Environmental Policy
ENVS 1530 From Locke to Deep Ecology: Property Rights and Environmental Policy

History
HIST 1580 Empire and Resistance: The Making of Modern South Asia
HIST1971P Identity Conflicts in Mid East History, 1900-Present
HIST 1972 Word of Mouth Oral History

International Relations
INTL 1800R Post-Soviet States from the Past into the Future

Political Science
POLS 1821C Economic Freedom & Social Justice

Sociology
SOC 0150 Economic Development and Social Change
SOC 1100 Introductory Statistics for Social Research
SOC 1620 Globalization and Social Conflict

Spring XLIST Courses of Interest to Concentrators in Development Studies
The following courses may be of interest to Development Studies concentrators. Please see the sponsoring department for the time and location of each course.

Africana Studies
AFRI 1360 Africana Studies, Texts, Methodologies

Anthropology
ANTH 0100 Cultural Anthropology: Understanding Human Societies
ANTH 1110 African Issues in Anthropological Perspective
ANTH 1232 War and Society

BioMed Community Health
PHP 1100 Comparative Health Care Systems

Economics
ECON 1110 Intermediate Microeconomics
ECON 1210 Intermediate Macroeconomics
ECON 1310 Labor Economics
ECON 1430 Population Economics
ECON 1520 The Economic Analysis of Institutions

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkssearch_public.P_Main).
ECON 1530 Health, Hunger and Households in Developing Countries
ECON 1620 Introduction to Econometrics
Education
EDUC 1100 Introduction to Qualitative Research Methods
Environmental Studies
ENVS 1920 Analysis and Resolution of Environmental Problems
History
HIST 1450 History of the Modern Middle East 1800-1918
HIST 1590 History of Modern South Asia II
Judaic Studies
JUDS 0980W The Israel-Palestinian Conflict
Latin American Studies
LAST 1510C Democracy and the (Un)Rule of Law in Latin America: Two Decades after Transitions
Political Science
POLI 0200 Introduction to Comparative Politics
POLI 1210 Latin American Politics
POLI 1240 Politics, Markets, and States in Developing Countries
POLI 1280 Politics, Economy and Society in India
POLI 1450 Political Economy of Development
POLI 1821X The Politics of Social Welfare in the Middle East
POLI 2190 Welfare States in Old and New Democracies
Religious Studies
RELS 0280D Women, Sex and Gender in Islam
Sociology
SOCI 0150 Economic Development and Social Change
SOCI 1010 Sociological Theory
SOCI 1100 Introductory Statistics for Social Research
Urban Studies
URBN 1420 Urbanization in China

Early Cultures

(For Undergraduates and Graduates)

1970 Individual Study Project
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.
Fall; Spr

East Asian Studies

Chinese

(Primarily for Undergraduates)

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. Enrollment limited to 18.

Fall CHIN0100 S01 10201 MWF 9:00-9:50 & TTh 9:30-10:20(18) (L. Hu)
Fall CHIN0100 S02 10202 MWF 10:00-10:50 & TTh 10:30-11:20(18) (L. Hu)
Fall CHIN0100 S03 10203 MWF 1:00-1:50 & TTh 1:30-2:20(18) (L. Hu)
Fall CHIN0100 S04 10204 MWF 2:00-2:50 & TTh 2:30-3:20(18) (L. Hu)

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. Enrollment limited to 18.

Spr CHIN0200 S01 20198 MWF 9:00-9:50 & TTh 9:30-10:20(18) (L. Hu)
Spr CHIN0200 S02 20199 MWF 10:00-10:50 & TTh 10:30-11:20(18) (L. Hu)
Spr CHIN0200 S03 20200 MWF 1:00-1:50 & TTh 1:30-2:20(18) (L. Hu)
Spr CHIN0200 S04 20201 MWF 2:00-2:50 & TTh 2:30-3:20(18) (L. Hu)

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. Enrollment limited to 18.

Fall CHIN0300 S01 10206 MWF 12:00-12:50 & TTh 12:00-12:50(17) (L. Hu)
Fall CHIN0300 S02 10207 MWF 1:00-1:50 & TTh 1:00-1:50(17) (L. Hu)
Fall CHIN0300 S03 10208 MWF 2:00-2:50 & TTh 2:30-3:20(17) (L. Hu)

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. Enrollment limited to 18.

Spr CHIN0400 S01 20203 MWF 12:00-12:50 & TTh 12:00-12:50(17) (L. Hu)
Spr CHIN0400 S02 20204 MWF 1:00-1:50 & TTh 1:00-1:50(17) (L. Hu)
Spr CHIN0400 S03 20205 MWF 2:00-2:50 & TTh 2:30-3:20(17) (L. Hu)

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. Enrollment limited to 18.

Fall CHIN0500 S01 13742 MWF 10:00-10:50 & TTh 9:30-10:20(17) (Y. Wang)
Fall CHIN0500 S02 10209 MWF 11:00-11:50 & TTh 11:00-11:50(17) (Y. Wang)
Fall CHIN0500 S03 10210 MWF 12:00-12:50 & TTh 12:00-12:50(17) (Y. Wang)

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. Enrollment limited to 18.

Spr CHIN0600 S01 20206 MWF 10:00-10:50 & TTh 9:30-10:20(17) (Y. Wang)
Spr CHIN0600 S02 20207 MWF 11:00-11:50 & TTh 11:00-11:50(17) (Y. Wang)
Spr CHIN0600 S03 23833 MWF 12:00-12:50 & TTh 12:00-12:50(17) (Y. Wang)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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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 10211 MWF 10:00-10:50(18) (H. Tseng)
Fall CHIN0700 S02 13303 MWF 1:00-1:50(18) (H. Tseng)

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 20208 MW 10:00-10:50(18) (H. Tseng)
Spr CHIN0800 S02 23281 MW 1:00-1:50(18) (H. Tseng)

0910 Chinese for Special Topics
For students who are ready to use Chinese in a field of interest. Courses will introduce a basic approach to conducting research in Chinese on various disciplines related to East Asian cultures. Students will read and discuss Chinese texts on specific topics and obtain general background information from reading source materials written in English. Prerequisite: CHIN 0800 or equivalent.

0910C Introduction to Modern Chinese Prose
Students will pursue their ability to appreciate and use various Chinese writing styles by reading and analyzing modern Chinese prose classics. Classes include lecture, discussion and group or individual presentations. By the end of the semester, students will be familiar with the development of modern Chinese prose, understand the language and meaning of each text, be comfortable with different writing styles and techniques, and have a deeper understanding of Chinese thought, society, and culture via the writers and their masterpieces. Conducted in Mandarin Chinese; designed for students with advanced language skills. Prerequisites: CHIN 0800 or the equivalent.

Fall CHIN0910C S01 16387 MWF 11:00-11:50(04) (H. Tseng)

0920 Chinese for Special Topics
See Chinese for Special Topics (CHIN 0910) for course description. Prerequisite: CHIN 0800 or permission of instructor.

0920C The Changing Face of China: Advanced Reading in Chinese Media
In order to develop advanced reading proficiency and formal oral and writing communication skills, students will listen to and read current news reports and commentaries from various Chinese media sources, such as TV broadcasts, newspapers, magazines, and websites. Throughout 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. General knowledge of Chinese newspapers, Chinese journalistic writing styles and basic vocabulary and grammatical structures used in the press will also be introduced throughout the course. Class format varies from lecture, discussion, and debate, to interviews and group or individual presentations. Prerequisites: CHIN0800 or the equivalent. Enrollment limited to 18.

Spr CHIN0920C S01 26336 TTh 2:30-3:50(11) (Y. Wang)

(For Undergraduates and Graduates)

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 16901 TTh 2:30-3:50(11) (L. Wang)

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. Instructor's permission required.
Fall; Spr
in East Asian culture or religion. Recommended but not required: RELS 0120.

Fall  EAST1400 S01 16636 W 3:00-5:20(14)  (J. Sawada)

1430T Leaves of Words: Japanese Poetry and Poetics (COLT 1430T)
Interested students must register for COLT 1430T S01 (CRN 25326).

1440 Themes in Japanese Buddhism: Original Enlightenment (RELS 1440)
Interested students must register for RELS 1440 S01 (CRN 16661).

1510A China’s Late Empires (HIST 1510A)
Interested students must register for HIST 1510A S01 (CRN 26025).

1530 Modern Korea (HIST 1530)
Interested students must register for HIST 1530 S01 (CRN 16935).

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. Instructor’s permission required.
Fall; Spr

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. Instructor’s permission required.
Fall

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. Instructor’s permission required.
Spr

1950 Undergraduate Seminars in East Asian Studies
These seminars are primarily for juniors and seniors. May be repeated for credit. Enrollment limited to 20.

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. Enrollment limited to 20.
Spr  EAST1950B S01 26383 W 3:00-5:20(14)  (L. Wang)

1950D Crime, Justice and Punishment in Modern Japan
This seminar explores the practices and ideologies associated with the pursuit of justice, state-sanctioned punishment for wrongdoing, and social order in modern Japan (late 19th century to the present). In order to bring these practices and ideologies to light, we will examine preceding-setting criminal and civil trials within their historical contexts, and draw as well on both popular culture (film and fiction) and the rich scholarship on law and legal history in Japan. The course is intended for advanced undergraduates comfortable with the seminar format and workload. There are no specific prerequisites for admission to the seminar, but all things being equal, preference will be given to students with a background in the study of Japan and/or Japanese history. Enrollment limited to 20. Instructor permission required
Spr  EAST1950D S01 26384 TTh 10:30-11:50(09)  (K. Smith)

1950F The Karma of Words
This course is an opportunity for students to further their understanding of East Asian Buddhist attitudes and values by investigating characteristic themes in literature as a whole, rather than by studying formal scriptures and doctrinal tracts. Participants will explore tensions between the religious and poetic impulses and learn to recognize Buddhist symbols in Chinese and Japanese poetry, fiction and plays. Recommended: a course in Asian religions. Enrollment limited to 20. WRIT
Spr  EAST1950F S01 26385 W 3:00-5:20(14)  (J. Sawada)

1950G Market Economy, Popular Culture, and Mass Media in Contemporary China
Course focuses on mainland Chinese cultural and media production since the mid 1980’s, when China began transforming itself culturally and economically into a capitalist society with socialist characteristics. Traditional values, socialist legacy, commercial forces, and globalization have all played significant roles in the ongoing transformation. The goal of the course is to examine the complex interactions among diverse historical forces in a rapidly changing China. Course taught in Mandarin Chinese. Enrollment limited to 20.
Spr  EAST1950G S01 26386 TTh 2:30-3:50(11)  (L. Wang)

1950Q Early Chinese Poetry
A survey of the evolution of major forms of Chinese lyric poetry beginning with the Shijing (Book of Songs), the breakthrough to 5-character verse in the Han Dynasty, landscape (shanshui) and field and garden (tianyuan) poetry of the 6 Dynasties, and the flowering of the shi form during the Tang Dynasty. Readings will be in Chinese, discussions in English. Previous study of classical Chinese or permission of the instructor required. Enrollment limited to 20.
Fall  EAST1950Q S01 16637 Th 4:00-6:20(13)  (D. Levy)

1950R The Problematic of Affect and Idea: Literature and Ideology in 20th Century China
The swaying vision of 20th century Chinese literature subjugates literature under the command of China as a nation in peril. The strife between the communists and nationalists in China’s “domestic” politics adds another layer of determinism in perceiving literature of modern China. This seminar reflects upon such determinism through the bifocal lens of affect and idea and inspects how the trends of traditionalism, iconoclasm, nationalism and communism are mediated, diverted or subverted through affective experience in literary representation. Readings include creative and critical literature and three weeks engaging with cinema. No knowledge of Chinese required. Enrollment limited to 20 juniors and seniors. Instructor permission required.
Spr  EAST1950R S01 26387 M 3:00-5:20(13)

1950S The History, Philosophy, and Practice of Rinzai Zen Buddhism
Follows origins of Chan Buddhism in China from the legend of Bodhidharma through the Five Houses of Chan and its great flourishing during the Song dynasty to its arrival and developments in Japan and eventual transplanting to the West. Scope includes Daoist foundations, the Buddha-Daoist essays of Seng Zhao, Bodhidharma, the East Mountain Chan of Daoxin and Hongren, Huieng and Shenhui, Huangbo, Linji, Dahui and the development of koan, Kanzen Egan in Japan, Ikkyu, Bankei, Hakuin, and Sasaki Joshu. Practices of each of these teachers will be studied in meditation labs. Prerequisites: coursework in Buddhism at Brown; permission of instructor. Enrollment limited to 20. Students MUST register for a lab, and a lecture section.
Fall  EAST1950S S01 16639 W 3:00-5:20(14)  (H. Roth)

1950X Queer Japan: Culture, History and Sexuality
This seminar investigates cultural practices enacted by Japanese gays and lesbians, or otherwise related to same-sex attraction. How have sexual identities traditionally been constructed in Japan, and how has the modern period transformed them? How has same-sex sexuality
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become figured in the Japanese art, literature and popular culture of the 20th century; and how have the forces of a global LGBT culture interacted with the specific experiences of a same-sex community in Japan? This class explores questions about queer history, writing and cultural practice by looking at particular moments in the Japanese past and present. Enrollment limited to 20.

Spr  EAST1950X S01 26388 Th 4:00-6:20(16) (S. Perry)

1973J Korea: North and South (HIST 1973J)
Interested students must register for HIST 1973J S01 (CRN 26690).

1973M Outside the Mainstream (HIST 1973M)
Interested students must register for HIST 1973M S01 (CRN 16945).

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. Instructor’s permission required.
Fall; Spr

Japanese
(Primarily for Undergraduates)

0100 Basic Japanese
Introduction to Japanese language. Emphasizes the attainment of good spoken control of Japanese and develops a foundation of literacy. No prerequisites. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade submitted at the end of the course work in JAPN 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.

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. Enrollment limited to 18.

Spr  JAPN0100 S01 20274 MWF 9:00-9:50 & TTh 9:00-10:20(16) (K. Yamashita)
Spr  JAPN0100 S02 20314 MWF 10:00-10:50 & TTh 10:30-11:50(16) (K. Yamashita)
Spr  JAPN0100 S03 20315 MWF 1:00-1:50 & TTh 1:00-2:20(16) (K. Yamashita)

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. Enrollment limited to 18.

Fall  JAPN0100 S01 10301 MWF 9:00-9:50 & TTh 9:00-10:20(13) (K. Yamashita)
Fall  JAPN0100 S02 10324 MWF 10:00-10:50 & TTh 10:30-11:50(13) (K. Yamashita)
Fall  JAPN0100 S03 10325 MWF 1:00-1:50 & TTh 1:00-2:20(13) (K. Yamashita)

0250 Advanced Beginning Japanese
Designed for those who have had high-school Japanese or other Japanese language experience. An opportunity to organize previous knowledge of Japanese and develop a firm basis of spoken and written Japanese. Prerequisite: Reading and writing knowledge of Hiragana, Katakana and some Kanji. Placement test required. This is the second half of a year-long course. Students must have taken JAPN 0150 to receive credit for this course. The final grade for this course will become the final grade for JAPN 0150. If JAPN 0150 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit.

Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email. Enrollment limited to 18.

Spr  JAPN0250 S01 20277 MWF 9:00-9:50 & TTh 9:00-10:20(02) (H. Tajima)

0300 Intermediate Japanese
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. Enrollment limited to 18.

Fall  JAPN0300 S01 10303 MWF 11:00-11:50 & TTh 11:00-11:50(18) (Y. Jackson)
Fall  JAPN0300 S02 10326 MWF 12:00-12:50 & TTh 12:00-12:50(18) (Y. Jackson)

0400 Intermediate Japanese
See Intermediate Japanese (JAPN 0300) for course description. Prerequisite: JAPN 0300 or equivalent. Enrollment limited to 18.

Spr  JAPN0400 S01 20278 MWF 11:00-11:50 & TTh 11:00-11:50(18) (H. Tajima)
Spr  JAPN0400 S02 20316 MWF 12:00-12:50 & TTh 12:00-12:50(18) (H. Tajima)

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

Fall  JAPN0500 S01 10305 MWF 2:00-2:50 & TTh 2:30-3:20(07) (H. Tajima)
0900 Advanced Japanese
See Advanced Japanese (JAPN 0500) for course description. Prerequisite: JAPN 0500 or equivalent.

Spr  JAPN0900  S01  20279  MWF 2:00-2:50 & TTh 2:30-3:20(07)  (H. Tajima)

0700 Advanced Readings in Japanese
Reading of articles from Japan's press with discussion in Japanese. Focuses on explanations and drills on the fine points in grammar and vocabulary as well as on the practice of writing in various styles. Movies and video tapes are used as supplementary materials. Prerequisite: JAPN 0600 or equivalent.

Fall  JAPN0700  S01  10308  TTh 2:30-3:50(11)  (Y. Jackson)

0910 Japanese for Special Topics
For students who are ready to use Japanese in a field of interest. Courses will introduce a basic approach to conducting research in Japanese, on various disciplines related to East Asian cultures. Students will read and discuss Japanese texts on specific topics and obtain general background information on topics from reading source materials written in English. Prerequisite: JAPN 0600 or equivalent.

0910A Classical Japanese
This is an introductory course to pre-modern Japanese. It will explore the lifestyle and philosophy of samurai in 17th century Japan through reading the book, Gorin no Sho. The book comprises Miyamoto Musashi's thoughts on swordplay, winning, and mind training. The course includes reading background information in English and viewing films and dramas.

Fall  JAPN0910A  S01  16084  MWF 11:00-11:50(07)  (K. Yamashita)

0920 Japanese for Special Topics
For students who are ready to use Japanese in a field of interest. Courses will introduce a basic approach to conducting research in Japanese, on various disciplines related to East Asian cultures. Students will read and discuss Japanese texts on specific topics and obtain general background information on topics from reading source materials written in English. Prerequisite: JAPN 0600 or equivalent.

0920B Japanese Cities: Tokyo and Kyoto
The goal of this course is to develop the ability to use Japanese source materials for research in social sciences. Course covers lifestyles in two contrasting cities, Tokyo and Kyoto. Topics include topography, environmental issues, houses, urban life-styles, and natural habitation. We will ask questions: why houses are so compact in cities; why crows and boars pick on garbage, etc. Information sources are films, videos, and websites in addition to textbooks. Prerequisite: JAPN 0600 or equivalent.

Fall  JAPN0920B  S01  15551  MWF 11:00-11:50(04)  (Y. Jackson)

0920A Business Japanese
Designed to teach post-advanced level Japanese language, with the focus on effective oral and written communication in business situations, this course emphasizes vocabulary building in the areas of business and economics, use of formal expressions, business writing, and conversation and presentation skills, as well as familiarizing students with Japanese corporate culture, protocol, and interpersonal relationships. Prerequisite: JAPN 0700 or equivalent. Instructor permission required.

Spr  JAPN0920A  S01  20281  MWF 10:00-11:00(12)  (Y. Jackson)

1310 Japanese Linguistics: Communication and Understanding Utterances
Introduces a linguistic analysis of Japanese language to attain an overview of structure and a foundation for understanding how grammar relates to various modes of communication. Topics include discourse analysis, pragmatics, communicative intention, communication strategies, and intercultural communication gaps. Linguistic data is drawn from films and fiction. Prerequisite: basic knowledge of Japanese grammar, vocabulary, and linguistics.

Spr  JAPN1310  S01  20282  M 3:00-5:20(13)  (K. Yamashita)

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. Instructor's permission required.

Fall; Spr

Korean

(Primarily for Undergraduates)

0300 Intermediate Korean
An intermediate course in Korean designed to further communicative competence in spoken Korean and to provide additional reading practice in stylistically higher level materials that are progressively integrated into the given dialogues. Discussions on various aspects of Korean culture and society. Four classroom hours per week. Prerequisite: KREA 0200 or instructor permission.

Fall  KREA0300  S01  15552  MF 12:00-12:50 & TTh 12:00-12:50(12)  (H. Wang)

0400 Intermediate Korean
See Intermediate Korean (KREA 0300) for course description. Prerequisite: KREA 0100-0200 or equivalent.

Spr  KREA0400  S01  25354  MF 12:00-12:50 & TTh 12:00-12:50(05)  (H. Wang)

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  S01  16638  MWF 11:00-11:50(04)  (H. Wang)

0600 Advanced Korean
See Advanced Korean (KREA 0500) for course description. Prerequisite: KREA 0500 or equivalent or permission of instructor.

Spr  KREA0600  S01  26389  MWF 11:00-11:50(04)  (H. Wang)

(For Undergraduates and Graduates)

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. Instructor’s permission required.

Fall; Spr

Economics

(Primarily for Undergraduates)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
0110 Principles of Economics
Extensive coverage of economic issues, institutions, and vocabulary, plus an introduction to economic analysis and its application to current social problems. Required for all economics concentrators. Prerequisite for ECON 1110, 1130, 1210 and 1620. Serves as a general course for students who will take no other economics courses and want a broad introduction to the discipline. Weekly one-hour conference required (conferences are not held during the summer session). Students MUST register for a conference, and a lecture section.

Sum ECON0110 S01 60279 TTh 9:00-1:00 (E. Ong)
Fall ECON0110 S01 12429 MWF 9:00-9:50(02) (R. Friedberg)
Spr ECON0110 S01 21700 MWF 9:00-9:50(02) (R. Friedberg)

0180 First Year Seminar
Enrollment limited to 20 first year students.

0180C Punishment and Inequality in America
This seminar will use social theory and social science evidence to understand how punishment works as a mechanism to produce inequality in American society. The institution of incarceration as a generator of social stigma is examined in this light. Zero-tolerance policing practices and racial profiling are discussed from this point of view as well. Questions about authority, legitimacy, deviancy, power and social cognition will guide the discussion. Enrollment limited to 20 first year students.

Fall ECON0180C S01 16863 M 1:00-3:50(06) (G. Loury)

0510 Development and the International Economy
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.

Spr ECON0510 S01 21646 MWF 1:00-1:50(06) (L. Putterman)

0710 Financial Accounting
Basic accounting theory and practice. Accounting procedures for various forms of business organizations.

Sum ECON0710 S01 60280 MWF 4:00-6:40 (R. D’Andrea)
Fall ECON0710 S01 12440 MW 6:00-7:20(18) (F. Sciuto)
Fall ECON0710 S02 12492 TTH 6:00-7:20(18) (H. Silva)
Spr ECON0710 S01 21701 MW 6:00-7:20(18) (F. Sciuto)
Spr ECON0710 S02 21702 TTH 6:00-7:20(18) (H. Silva)

For Undergraduates and Graduates

1110 Intermediate Microeconomics
Tools for use in microeconomic analysis, with some public policy applications. Theory of consumer demand, theories of the firm, market behavior, welfare economics, and general equilibrium. Prerequisite: MATH 0060, 0070, 0090, 0100, 0170, 0180, 0190, 0200, or 0350; and ECON 0110; or advanced placement.

Sum ECON1110 S01 60281 TTh 1:30-5:30
Fall ECON1110 S01 12441 TTH 10:30-11:50(09)
Fall ECON1110 S02 12509 MWF 2:00-2:50(07)
Fall ECON1110 S03 13713 MWF 1:00-1:50(06)
Spr ECON1110 S01 21713 MWF 9:00-9:50(02) (G. DeClippel)
Spr ECON1110 S02 21714 MWF 10:00-10:50(03) (G. DeClippel)
Spr ECON1110 S03 23658 TTH 10:00-10:20(08) (P. Dai Bo)

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. Students MUST register for a conference, and a lecture section.

Spr ECON1130 S01 24203 TTh 10:30-11:50(09) (N. Baun-Snow)

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.

Sum ECON1210 S01 60367 TTh 9:00-1:00 (E. Depetris Chauvin)
Fall ECON1210 S01 12442 TTH 9:00-10:20(08) (P. Howitt)
Fall ECON1210 S02 12512 MW 8:30-9:50(02)
Spr ECON1210 S01 21715 MWF 10:00-10:50(03)
Spr ECON1210 S02 21716 TTh 10:30-11:50(09)

1300 Education, the Economy and School Reform (EDUC 1150)
Interested students must register for EDUC 1150 S01 (CRN 26535).

1310 Labor Economics
Labor supply, human capital, income inequality, discrimination, immigration, unemployment. Prerequisite: ECON 1110 or 1130; and 1620 or 1630.

Spr ECON1310 S01 26726 TTh 1:00-2:20(10)

1350 Environmental Economics and Policy (ENVS 1350)
Interested students must register for ENVS 1350 S01 (CRN 11644).

1355 Economics of the Environment in Developing Countries (ENVS 1355)
Interested students must register for ENVS 1355 S01 (CRN 24497).

1360 Health Economics
This course introduces students to the issues, theory and practice of health economics in the US. Topics include the economic determinants of health, the market for medical care, the market for health insurance and the role of the government in health care. Course work includes data analyses using the program STATA. Prerequisites: ECON 1110 or 1130; and ECON 1620, 1630, or APMA 1650 or other statistics background. Enrollment limited to 24. Students MUST register for a conference, and a lecture section.

Spr ECON1360 S01 21648 TTh 9:00-10:20(08) (A. Aizer)

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. Recommended prerequisite: ECON 1110 or 1130. Enrollment limited to 25.

Spr ECON1370 S01 26622 TTh 1:00-2:20(10) (G. Loury)

1390 Research Methods for Economists
This course is designed to prepare students to undertake empirical research in economics. Students thinking of writing an honors thesis or conducting independent research are especially urged to take it during their junior year. We will answer such questions as what does an empirical research paper look like? How do we formulate a hypothesis to test? How can we use data to test our hypothesis? 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. Students MUST register for a conference, and a lecture section.

Spr ECON1390 S01 24502 TTh 2:30-3:50(11) (A. Aizer)
1410 Urban Economics
The first part of the course covers the set of conceptual and mathematical models widely used to understand economic activity both between and within cities. The second part of the course examines various urban policy issues including urban transportation, housing, urban poverty, segregation and crime. The course makes extensive use of empirical evidence taken primarily from the United States. Prerequisites: ECON 1110 or 1130, and ECON 1620 or 1630.

Spr ECON1410 S01 25640 TTh 2:30-3:50(11) (N. Baum-Snow)

1420 Urbanization in China
Examines urbanization processes and urban public policy in China. Also draws on historical and recent experience in the U.S. Policy areas including policies affecting urbanization, migration, and industrial location; policies affecting housing, land use, and urban reform; and policies affecting fiscal decentralization and infrastructure investments such as transportation. Prerequisites: ECON 1110 or ECON 1130. Open to juniors and seniors. Enrollment limited to 25.

Spr ECON1420 S01 23638 TTh 2:30-3:50(11) (J. Henderson)

1440 Economic Theories of Firms
Examines theories of why firms exist, their internal organizations and employment relations, ownership and control, efficiency versus conflict approaches, and alternative organizational forms (e.g., employee ownership). Prerequisite: ECON 1110 or 1130.

Spr ECON1440 S01 26623 MWF 10:00-10:50(03)

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.

Fall ECON1460 S01 16085 TTh 9:00-10:20(08) (I. Fainmesser)

1465 Market Design: Theory and Applications
This course studies the design of organized markets, focusing on efficient organization and the incentives created by market rules. The analysis relies on a mix of documenting the rules of real-world markets, game theoretic analysis, empirical analysis, and experimental work. Applications include: online auction markets (e.g., eBay, Amazon); ad auctions (e.g., Google); matching markets, including matching students to schools, matching workers to jobs (e.g., medical residents to hospitals, lawyers to clerkship positions), matching kidney donors to recipients, and online dating. Prerequisites: ECON 1110 or 1130; MATH 0060, 0070, 0090, 0100, 0170, 0180, 0190, 0200, or 0350; or instructor permission. Enrollment limited to 25 juniors, seniors, and graduate students.

Fall ECON1465 S01 16151 W 3:00-5:20(14) (I. Fainmesser)

1470 Bargaining Theory and Applications
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.

Fall ECON1470 S01 15806 TTh 1:00-2:20(10) (P. Dai Bo)

1480 Public Economics
An analysis of the role of government in the allocation of resources. Topics include welfare economics (a review), problems of social choice, the evaluation of public expenditures, and taxation. Prerequisite: ECON 1110 or 1130.

Spr ECON1480 S01 26517 TTh 2:30-3:50(11) (B. Knight)

1485 Social Security Reform
The course looks at the economics of social security reform with particular focus on possible policy responses to the increasing fraction of the population that is elderly in OECD countries. Among the topics that will be considered are pay as you go funding, defined benefits versus defined concentrations, privatization, labor market effects of pensions, retirement decisions, labor supply by couples, and macroeconomic effects. Prerequisite: ECON 1110. Enrollment limited to 30. Not open to first-year students.

Fall ECON1485 S01 16309 W 3:00-5:20(14) (E. Sheshinski)

1500 Current Global Macroeconomic Challenges
Analysis of current economic challenges in the U.S. 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 China and the U.S., including their global impact. Prerequisites: ECON 1210. Also recommended: ECON 1550 and 1850.

Fall ECON1500 S01 12457 MWF 11:00-11:50(04) (M. Carkovic)

1510 Economic Development
The economic problems of less developed countries and the theory of economic development, with emphasis on the roles played by agriculture, industry, and foreign trade. Also: education, health, employment, and migration; capital accumulation; income distribution; institutional aspects; the role of price distortions; trade policies; social discount rates, investment criteria, and the general issue of state intervention. Prerequisite: ECON 1110 or 1130, and ECON 1620 or 1630.

Spr ECON1510 S01 25972 TTh 1:00-2:20(10) (A. Sautmann)

1520 The Economic Analysis of Institutions
This course deals with the economic analysis of institutions, with a focus on developing countries. The first section covers institutions in traditional agrarian societies. Topics include consumption smoothing and the organization of land, labor and credit markets. The second section focuses on the role of the community in facilitating economic activity. Institutions include cooperatives, networks, marriage and the family. Prerequisites: ECON 1110 or 1130, and ECON 1620 or 1630; or equivalent. Enrollment limited to 45.

Fall ECON1520 S01 15807 TTh 10:30-11:50(09) (K. Munshi)

1530 Health, Hunger and the Household in Developing Countries
Microeconomic analysis of household behavior in low income societies emphasizing the economic determinants of health and nutrition and the evaluation of policy. The relationship among health, nutrition, fertility, savings, schooling, labor productivity, wage determination, and gender-based inequality. Emphasizes theoretically-based empirical research. Prerequisite: ECON 1110 or 1130.

Spr ECON1530 S01 26629 TTh 9:00-10:20(08)

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.

Fall ECON1540 S01 12458 MWF 2:00-2:50(07) (M. Carkovic)

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.

Spr ECON1550 S01 21657 MWF 1:00-1:50(06) (G. Borts)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
**1560 Economics**

**Economics 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.

Fall ECON1560 S01 16870  MWF 1:00-2:20(10)  (D. Well)

**1590 The Economy of China since 1949**
The organization, structure, and performance of the economy of the People's Republic of China. All economic sectors and both the pre-1978 and the post-1979 periods are examined with emphasis on institutions. Both analytical and descriptive methods used. Prerequisite: ECON 1110 or 1130. ECON 1210, 1510, and 1580 are recommended but not required.

Fall ECON1590 S01 16872  MWF 10:00-10:50(03)  (L. Putterman)

**1620 Introduction to Econometrics**

Fall ECON1620 S01 12459  TTh 2:30-3:50(11)  (B. Melly)
Spr ECON1620 S01 21718  MW 11:00-11:50(04)

**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. Convergent concepts and matrix algebra are used extensively. Prerequisites: ECON 1110 or 1130; and APMA 1650, MATH 1620, or ECON 1620; or equivalent.

Fall ECON1630 S01 12460  MW 8:30-9:50(02)  (F. Kleibergen)
Spr ECON1630 S01 24503  MW 8:30-9:50(02)  (F. Kleibergen)

**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.

Fall ECON1640 S01 16040  MW 11:00-11:50(04)

**1650 Financial Econometrics**
Financial time series, for example, asset returns, options and interest rates, possess a number of stylized features that are analyzed using a specific set of econometric models. This course deals with an introduction to such models. It discusses time series models for analyzing asset returns and interest rates, (GARCH) models to explain volatility, models to explain extreme events which are used for the Value at Risk and models for options prices. Prerequisite: ECON 1620 or ECON 1630, or instructor permission.

Spr ECON1650 S01 26630  MW 2:00-2:50(07)

**1710 Investments I**
The function and operation of asset markets; the determinants of the prices of stocks, bonds, options, and futures; the relation 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.

Fall ECON1710 S01 16106  MW 9:00-9:50(02)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
1790 Corporate Governance and Management
A corporation’s economic success depends on access to human capital and other resources, effective management of these resources, and a governance system that ensures effective decision making. The course offers policy prescriptions in economic incentives and regulatory rules that attempt to align management with investors. Prerequisites: ECON 1110 or 1130; ECON 1620 or 1630; or APMA 1650; ECON 1720; ECON 0710. Enrollment limited to 40.

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 and 0340 (or equivalent) or MATH 0180, 0200, or 0350 (or equivalent).

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; MATH 0100, or 0170, or 0180, or 0190, or 0200, or 0350; and ECON 1620 or 1630 or APMA 1650, or MATH 1610.

1960 Honors Tutorial for Economics Majors
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.

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

(Primarily for Graduates)

2010 Mathematics for Economists
Techniques of mathematical analysis useful in economic theory and econometrics. Linear algebra, constrained maximization, difference and differential equations, calculus of variations.
Fall ECON2010 S01 12468 MW 9:00-10:20(02) (M. Dean)

2020 Applied Economics Analysis
This course provides students with skills needed to integrate economic theory, econometric methods, and data management in the analysis of economic problems. Provides a hands-on perspective including assignments designed to derive testable propositions from simple economic models, illustrate the loading, cleaning and merging of complex survey data, and provide experience in the selection and interpretation of basic econometric methods.
Spr ECON2020 S01 21677 TTh 10:30-11:50(09) (A. Sautmann)

2030 Introduction to Econometrics I
The probabilistic and statistical basis of inference in econometrics.
2370 Inequality: Theory and Evidence
This course uses economic theory to study the problems of inequality. The emphasis is two-fold: (1) to explain persistent resource disparities between individuals or social groups; and, (2) to assess the welfare effects of various equality-promoting policies. Topics include racial stereotypes, residential segregation, distributive justice, incentive effects of preferential policies, dysfunctional identity, and endogenous inequality due to the structure of production and exchange. Enrollment limited to 20.

Spr ECON2370 S01 26631 Th 4:00-6:20(16) (G. Loury)

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 24210 TTh 10:30-11:50(09) (J. Henderson)

2420 The Structure of Cities
This course covers standard urban land use theory, urban transportation, sorting across political jurisdictions, hedonics, housing, segregation and crime. Empirical examples are taken primarily from the United States. After taking the course, students will have an understanding of standard urban theory and of empirical evidence on various important applied urban topics. In addition, students will gain practical experience in manipulating spatial data sets and simulating urban models.

Fall ECON2420 S01 14291 TTh 9:00-10:20(08) (N. Baum-Snow)

2470 Industrial Organization
Monopolistic competition, market structure and entry, nonprice competition, economics of information.

Spr ECON2470 S01 26727 TTh 2:30-3:50(11) (J. Hastings)

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.

Fall ECON2480 S01 16284 MW 10:30-11:50(04) (B. Knight)

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 25901 TTh 9:00-10:20(08) (A. Foster)

2520 Economic Development II
This course deals with the economic analysis of institutions, with a particular focus on community-based institutions in developing countries. Institutions covered in this course includes cooperatives, ROSCAS, networks, marriage and the family.

Fall ECON2520 S01 15822 TTh 2:30-3:50(11) (K. Munshi)

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 16878 TTh 1:00-2:20(10)

2640 Microeconometrics
Topics in microeconometrics treated from a modern Bayesian perspective. Limited and qualitative dependent variables, selectivity bias, duration models, panel data.

Fall ECON2640 S01 14294 MW 1:00-2:20(06) (F. Kleibergen)

2660 Macroeconometrics I
Topics in Econometrics. The lecture consists of a number of influential articles in Econometrics on topics like GMM, Empirical Processes, Weak instruments, Non-and Semi-parametric regression, Bootstrap, Edgeworth approximation.

Spr ECON2660 S01 26632 MW 10:30-11:50(04)

2830 Dynamic Optimization and Economic Growth
The role of human capital, income distribution, population growth, technological progress, and international trade in the determination of differences in growth performance across countries. Inequality and economic growth. Technological progress and wage inequality. The transition from stagnation to sustained growth. Evolution and growth.

Fall ECON2830 S01 13700 F 9:30-11:50(03) (O. Galor)

2840 Empirical Analysis of Economic Growth
Examines economic growth, focusing on the effects of technological change, fertility, income inequality, and government policy. ECON 2830 is strongly recommended.

Spr ECON2840 S01 25656 TTh 1:00-2:20(10) (D. Weil)

2930 Workshop in Applied Economics

Fall ECON2930 S01 12478 Th 4:00-5:30(13)
Spr ECON2930 S01 21725 Th 4:00-5:30(16)

2950 Workshop in Econometrics
Fall ECON2950 S01 12485 M 4:00-5:30(13)
Spr ECON2950 S01 21726 M 4:00-5:30(13)

2960 Workshop in Macroeconomics and Related Topics

Fall ECON2960 S01 12487 W 4:00-5:30(14)
Spr ECON2960 S01 21727 W 4:00-5:30(14)

2970 Workshop in Economic Theory

Fall ECON2970 S01 12488 M 4:00-5:30(13)
Spr ECON2970 S01 21728 M 4:00-5:30(13)

2971 Race and Inequality Seminar
This is a workshop primarily for graduate students and faculty in the Department of Economics where original research on issues of race and inequality are presented by external visitors, along with Brown faculty and graduate students. No course credit.

Fall ECON2971 S01 15207 T 4:00-5:30(13)
Spr ECON2971 S01 25707 T 4:00-5:30(16)

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.

Fall, Spr

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
**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 12490 'To Be Arranged'  
Spr ECON2990 S01 21699 'To Be Arranged'  

**Education**

(Primarily for Undergraduates)

**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  
Fall EDUC0400 S01 10923 MWF 11:00-11:50(04) (L. Spoehr)

**0410 First Year Seminar**  
Enrollment limited to 20 first year students.  

**0410D Brown v. Board of Education**  
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 and analyze its impact on the civil rights movement, schooling, law, and politics in the late twentieth century and consider its implications for the future. Enrollment limited to 20 first year students. FYS DVPS WRIT  
Fall EDUC0410D S01 16792 W 3:00-5:20(14) (T. Steffes)

**0410E Empowering Youth: Insights from Research on Urban Adolescents**  
Together, we consider the design, analysis, and interpretation of research on youth in urban settings. In doing so, we examine the roles of power, privilege, and multiculturalism in research. In the experiential component of the course, students engage in fieldwork in a local school or community-based youth organization. As part of their fieldwork, students design and undertake a research project, thereby bridging theory with practice. Reserved for First Year students. Enrollment limited to 20 first year students. FYS DVPS WRIT  
Spr EDUC0410E S01 23505 W 3:00-5:20(14) (D. Rivas)

**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 10931 TTh 1:00-2:20(10) (J. Li)

**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. Enrollment limited to 20.  
Fall EDUC0900 S01 13754 M 3:00-5:20(13) (D. Bisaccio)

(For Undergraduates and Graduates)

**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.  
Fall EDUC1010 S01 10932 Th 4:00-6:20(13) (M. Sigler)

**1020 The History of American Education**  
An introduction to the historical study of schooling in the U.S. Drawing together social, political, economic, and cultural perspectives, explores how public schooling has related to different groups in American history.  
Fall EDUC1020 S01 16362 TTh 10:30-11:50(09) (T. Steffes)

**1040 Sociology of Education**  
The eclectic sociological imagination is turned upon that crucial modern institution: education. Considers formal education as a contemporary institution and schools as organizations both in comparative perspective and in more microscopic ways. Asks what schools and schooling means to society and to children from different social and economic circumstances. Enrollment limited to 50.  
Fall EDUC1040 S01 15723 Th 9:00-10:20(08) (J. Modell)

**1050 History of African-American Education**  
This course will examine the history of African-American education with particular emphasis on the twentieth century. We will explore African-Americans' experiences with schooling under slavery and segregation, the struggle for desegregation and equity North and South, and the place of education in African-Americans' quest for equal rights. We will also consider how the African-American experience with public schooling makes us rethink major narratives of American education, democracy, and equality of opportunity and how an historical understanding of these issues may help us engage contemporary debates. DVPS  
Spr EDUC1050 S01 26131 TTh 10:30-11:50(09) (T. Steffes)

**1060 Politics and Public Education**  
Who exercises power in public education? This course examines the key institutions (e.g. school districts, states, Congress, and the courts) and actors (e.g. parents, teachers, interest groups, and the general public) shaping American K-12 education in order to understand recent policy trends and their consequences for students. Major policies discussed include school finance, textbook adoption, school accountability, and school choice. Particular attention is given to the federal No Child Left Behind Act of 2001 and debates over its reauthorization. Previous coursework in American politics or public policy is suggested but not required.  
Fall EDUC1060 S01 13571 MWF 10:00-10:50(03)  

**1070 Student Teaching**  
Provides no fewer than 180 hours of practice teaching and observation, equivalent to 6 semester hours of credit in institutions operating on a semester hour basis, and fulfills the supervised student teaching requirement for secondary school teaching certification in most states. Prerequisite: EDUC 2060. Restricted to students in the Undergraduate Teacher Education Program. S/NC.  

**1070A Student Teaching: English**  
S/NC.  

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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<td>Economics of Education I</td>
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<td>R. Cho</td>
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<td>Student Teaching: History and Social Studies</td>
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<td>L. Snyder</td>
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<td>EDUC1070B</td>
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<td>Student Teaching: History and Social Studies</td>
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<td>EDUC1080A</td>
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<td>EDUC1080B</td>
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<td>EDUC1100</td>
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<td>Introduction to Qualitative Research Methods</td>
<td>S01</td>
<td>J. Demick</td>
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<td>EDUC1110</td>
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<td>Introductory Statistics for Education Research and Policy Analysis</td>
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<td>R. Cho</td>
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<td>EDUC1150</td>
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<td>Education, the Economy and School Reform</td>
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<td>Evaluating the Impact of Social Programs</td>
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<td>EDUC1200</td>
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<td>History of American School Reform</td>
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<td>EDUC1270</td>
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<td>From Theory to Practice in Engaged Scholarship: Creating Community Based Learning Courses</td>
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<td>EDUC1430</td>
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<td>The Psychology of Race, Class, and Gender</td>
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For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
1450 The Psychology of Teaching and Learning
Seeks both to demystify the process of teaching and to illuminate its complexities. Assists students with such questions as: What shall I teach? How shall I teach it? Will my students respond? What if I have a discipline problem? Focuses on the teaching-learning process and student behavior, as well as research, theory, and illustrations concerned with classroom applications of psychological principles and ideas. Prerequisites: EDUC 0800 or EDUC 1710. Enrollment limited to 50.

Fall EDUC1450 S01 15950 Th 4:00-6:20(13)

1580 Cross-Cultural Perspectives on Child Development
Focus on role of culture in child development, infancy to young adulthood. Reviews contemporary theories and empirical research to examine various age periods and domains of development. Major topics: infant care, parenting, socialization, gender roles, cognition, moral development, affect, adolescence, and education and schooling in formal and informal settings. Enrollment limited to 50.

Spr EDUC1580 S01 20729 MWF 1:00-1:50(06) (J. Li)

1620 Teaching Topics in American History and Literature, 1945-1980
Combines intensive study of primary and secondary sources from American history and literature between 1945 and 1980 with extensive consideration of how to teach these topics to secondary school students. Topics include the Cold War, McCarthyism, consumer society, civil rights, the women's movement, Vietnam, and Watergate, often studied through unconventional sources such as popular music, movies, television shows, and fiction. Prerequisite: HIST 0520 or equivalent. Enrollment limited to 20.

Spr EDUC1620 S01 26533 M 3:00-5:20(13) (L. Spoehr)

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
Spr EDUC1650 S01 20731 W 3:00-5:20(14) (K. Wong)

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. Enrollment limited to 20.

Spr EDUC1690 S01 26534 M 3:00-5:20(13) (L. Snyder)

1710 History and Theories of Child Development
An examination of child development from a historical and theoretical perspective, including key historical figures such as Darwin, Hall, Baldwin, Binet, Freud, Watson, Piaget, Vygotsky, Gesell, McGraw, Bowlby, and Bayley. Explores theoretical conceptualizations of children and adolescents and investigates the representations of children in popular culture, governmental legislation, education, and public policy.

Fall EDUC1710 S01 14624 MWF 1:00-1:50(06) (C. Garcia Coll)

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
Fall EDUC1730 S01 16794 MWF 2:00-2:50(07) (L. Spoehr)

1750 Contemporary Social Problems: Views from Human Development and Education
Explores social problems in terms of contemporary theories and research in human development and education. The class chooses issues for discussion and researches their mechanisms and possible solutions. Demands basic knowledge of theory and research in psychology, sociology, anthropology, and background in educational issues. Prerequisite: EDUC 0800, 1270, or 1710; or any other two social science courses.

Fall EDUC1750 S01 16282 TTh 1:00-2:20(10) (C. Garcia Coll)

1850 Moral Development and Education
Examines contending approaches to moral development and its fostering in the home, school and peer group. Topics include philosophical underpinnings of moral theory, cognitive and behavioral dynamics of moral growth, values climate of contemporary American society, the role of schooling, and variations attributable to culture and gender. Prerequisites: EDUC 0800, 1270, or 1710, or CLPS 0610 (COGS 0630), or CLPS 0600 (PSYC 0810). Enrollment limited to 30.

WRIT
Fall EDUC1850 S01 13775 Th 4:00-6:20(13) (J. Li)

1860 Social Context of Learning and Development
Focuses on the social environment that contributes to the development of children's minds, language, self-understanding, relations with others, affect, and attitudes toward learning. Examines the period from birth through young adulthood. Topics include children's social interactions, parental expectations and socialization practices, and the influences of family, peers, school, and media. Prerequisites: EDUC 0800, EDUC 1270, EDUC 1430, EDUC 1580, EDUC 1710, CLPS 0610 (COGS 0630), or equivalent. Enrollment limited to 30. Instructor permission required.

WRIT
Spr EDUC1860 S01 23840 Th 4:00-6:20(16) (J. Li)

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.

Fall, Spr

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.

Fall, Spr

1991 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.

Fall, Spr

(Primarily for Graduates)

2060 Methods of Teaching
Restricted to students in the MAT and UTEP programs. Offered during the summer in conjunction with supervised teaching in the Brown Summer High School. S/NC.

2060A Methods of Teaching: English
S/NC. Instructor's permission required.

Sum EDUC2060A S01 60191 "To Be Arranged" (L. Snyder)
2060B  Methods of Teaching: History and Social Studies
S/NC. Instructor’s permission required.

Sum  EDUC2060B  S01  60192  'To Be Arranged'  (M. Sigler)

2060C  Methods of Teaching: Science
S/NC. Instructor’s permission required.

Sum  EDUC2060C  S01  60193  'To Be Arranged'  (D. Bisaccio)

2070  Student Teaching
Open only to students in the MAT Program. S/NC.

2070A  Student Teaching: English
S/NC.

Fall  EDUC2070A  S01  11148  'To Be Arranged'  (L. Snyder)
Spr  EDUC2070A  S01  20815  'To Be Arranged'  (L. Snyder)

2070B  Student Teaching: History and Social Studies
S/NC.

Fall  EDUC2070B  S01  11150  'To Be Arranged'  (M. Sigler)
Spr  EDUC2070B  S01  20816  'To Be Arranged'  (M. Sigler)

2070C  Student Teaching: Science
S/NC.

Fall  EDUC2070C  S01  11180  'To Be Arranged'  (D. Bisaccio)
Spr  EDUC2070C  S01  20825  'To Be Arranged'  (D. Bisaccio)

2080  Analysis of Teaching
An analysis of certain aspects of teaching activity in their relation to theoretical principles of teaching. Elected in conjunction with EDUC 2070, Student Teaching, and required of all candidates for the Master of Arts in Teaching degree. (Credit related to EDUC 2070. No credit course.

2080A  Analysis of Teaching: English
No credit course.

Fall  EDUC2080A  S01  11181  W 4:00-6:20(14)  (L. Snyder)
Spr  EDUC2080A  S01  20826  W 4:00-6:20(14)  (L. Snyder)

2080B  Analysis of Teaching: History and Social Studies
No credit course.

Fall  EDUC2080B  S01  11182  W 4:00-6:20(14)  (M. Sigler)
Spr  EDUC2080B  S01  20831  W 4:00-6:20(14)  (M. Sigler)

2080C  Analysis of Teaching: Science
No credit course.

Fall  EDUC2080C  S01  11184  W 4:00-6:20(14)  (D. Bisaccio)
Spr  EDUC2080C  S01  20828  W 4:00-6:20(14)  (D. Bisaccio)

2090  Literacy Across the Curriculum
Focuses on three major areas of pedagogy: literacy across the curriculum, special education, and teaching English Language Learners. Topics include: current theory and practice in the three areas, legal requirements for special education, planning for differentiated instruction, assessment and diagnosis of student skill levels, measuring and reporting student achievement, adapting content for ELLs, selecting and working with texts, and effective vocabulary instruction. Open to MAT students only. S/NC.

Sum  EDUC2090  S01  60196  TTh 1:30-4:30

2110  Summer Practicum and Analysis
Introduces MAT students to elementary school students through work in a unique summer enrichment program for inner city Providence children: Summer Prep readings and seminar meetings focus on arts education; introductions to the teaching of literacy, math and science; curriculum and lesson planning; creating a community of learners; issues of diversity; and physical education. S/NC. Instructor’s permission required.

Sum  EDUC2110  S01  60197  'To Be Arranged'

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/NC.

Fall  EDUC2120  S01  11218  W 4:00-6:45(14)

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/NC.

Fall  EDUC2140  S01  13689  F 12:30-3:30(06)
Spr  EDUC2140  S01  20833  F 12:30-3:30(06)

2150  Language and Literacy in the Elementary School Classroom
An introduction to Comprehensive Literacy instruction in reading and writing, including strategies for teaching interactive read alouds; shared reading and shared writing; phonics and word work; independent reading workshop; guided reading; writer's notebooks; writing workshop; and children's literature via an author study. S/NC.

Fall  EDUC2150  S01  11231  M 4:00-6:45(13)
Spr  EDUC2150  S01  20834  M 4:00-6:45(13)

2270  Student Teaching
Provides no fewer than 180 hours of student teaching and observation-equivalent to six semester hours of credit in institutions operating on a semester-hour basis and fulfills the supervised student teaching requirements for elementary school teaching certification in Rhode Island and in ICC member states. S/NC.

Spr  EDUC2270  S01  20835  'To Be Arranged'

2280  Seminar: Principles of Learning and Teaching
A critical analysis of the activity of teaching, restricted to and required of students taking EDUC 2270. The course requires curriculum and lesson planning, reflective analyses of student learning and classroom teaching, and places learning and teaching in context with attention to issues of diversity of schools and their student bodies. S/NC.

Spr  EDUC2280  S01  20836  W 4:00-6:45(14)

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  11238  TTh 9:00-10:20(08)  (R. Cho)

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  11239  W 3:00-5:20(14)  (K. Wong)

2340  Human Development and Urban Education
In this course we will learn relevant theories and research in the academic field of Human Development to urban education practice and for complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
policy from preschools to high schools. Special emphasis will be placed in areas where there is research convergence and that are relevant to urban populations and settings. Recommended prerequisites: EDUC 0800 or EDUC 1710 or EDUC 1750.

Spr EDU2360 S01 20839 TTh 2:30-3:50(11)

2350 Economics of Education II
Introduces students to the main economic theories and related applied work that inform education policy analysis. In so doing, the course combines economic theory, econometric studies, and education and institutional literature in an examination of current issues in U.S. education, particularly those issues that are most relevant to urban education. The course begins with examinations of key concepts and theories from microeconomics, labor economics, and public economics that are most relevant for studying questions in education. After laying this theoretical foundation the course then examines how these theories can illuminate and aid policy analysis around key topics in U.S. education. Open to graduate students only.

Fall EDU2350 S01 16281 TTh 1:00-2:20(10)

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 EDU2360 S01 20837 TTh 2:30-3:50(11)

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 EDU2370 S01 11241 'To Be Arranged' (K. Wong)

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 EDU2380 S01 20837 'To Be Arranged' (K. Wong)

2980 Studies in Education
Independent study; must be arranged in advance. Section numbers vary by instructor. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall; Spr

2990 Thesis Preparation
Fall EDU2990 S01 13560 'To Be Arranged'
Spr EDU2990 S01 20840 'To Be Arranged'

Fall XLIST Courses of Interest to Concentrators in Education
The following related courses in Education Studies are offered. Please check with the sponsoring department for times and locations.

Anthropology
ANTH 1212 The Anthropology of Play

Egyptology and Ancient Western Asian Studies

(Spring for Undergraduates and Graduates)

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

Spr AWAS0300 S01 26391 TTh 10:30-11:50(09) (J. Steele)

English
ENGL 1110 Seminar in the Teaching of Writing

Spring XLIST Courses of Interest to Concentrators in Education
The following related courses in Education Studies are offered. Please check with the sponsoring department for times and locations.

History
HIST 1972K Rethinking Society in Industrial America

Portuguese and Brazilian Studies
POBS 1600C Cross-Cultural Perspectives on Education: Education and the Portuguese-Speaking World

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
ARCH 0150 Introduction to Egyptian Archaeology and Art
Fall AWAS1750 S01 16642 TTh 1:00-2:20(10) (M. Rutz)

(Primarily for Graduates)

2120 Historiography of Exact Sciences
Introduces graduate students to the sources, problems, and methodologies of the history of astronomy and mathematics from Babylon to Kepler. Prerequisite: AWAS 0200. Open to graduate students only.
Fall AWAS2120 S01 16643 ‘To Be Arranged‘ (J. Steele)

2310 Ancient Scientific Texts
Readings and analysis of a major scientific text in Akkadian, Arabic, Greek, Latin, or Sanskrit. May be repeated with a different text.

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 AWAS2310A S01 24238 TTh 2:30-3:50(11) (J. Steele)

2310B Assyriology I
The kings of Babylonia and Assyria took every opportunity to boast about their military victories, successful hunts, the completion of new cities, and the building and decoration of temples and palaces. But is theirs the only possible version of Mesopotamian history? This course examines episodes in the history of Babylonia and Assyria (ca. 2400-500BCE) by looking at the political and social relationships among kings, political elites, entrepreneurs, and commoners; emphasis is placed on reading Akkadian texts both in the original and in translation, with a focus on letters, royal inscriptions, and astrological reports. Prerequisite: AWAS0210 or instructor's permission. WRIT
Fall AWAS2310B S01 16644 W 3:00-5:20(14) (M. Rutz)

2700 Special Topics in Ancient Sciences
This course will be a topics course containing a detailed technical and cultural study of an area of science in a culture of the ancient world. Although intended for graduate students, undergraduate students who have taken EGYT 1600 or AWAS 1600 or a similar course may be admitted at the instructor's discretion.
Fall AWAS2700 S01 16645 TTh 2:30-3:50(11) (J. Steele)

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.
Fall; Spr

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 AWAS2990 S01 14326 ‘To Be Arranged’
Spr AWAS2990 S01 24241 ‘To Be Arranged’

Fall XLIST Courses of Interest to Concentrators in Ancient Western Asian Studies
The following courses may be of interest to Ancient Western Asian Studies concentrators. Please see the sponsoring department for the time and location of each course.

Anthropology
ANTH 1151 Ethnographies of the Middle East
ANTH 2540 Historical Archaeology
Institute for Archaeology and the Ancient World
ARCH 0100 Field Archaeology in the Ancient World
ARCH 1710 Architecture and Memory

Spring XLIST Courses of Interest to Concentrators in Ancient Western Asian Studies
The following courses may be of interest to Ancient Western Asian Studies concentrators. Please see the sponsoring department for the time and location of each course.

Anthropology
ANTH 2320 Ideology of Development
Institute for Archaeology and the Ancient World
ARCH 0150 Introduction to Egyptian Archaeology and Art
ARCH 1475 Petra: Ancient Wonder, Modern Challenge
ARCH 1600 Archaeologies of the Near East

Egyptology

(For Undergraduates and Graduates)

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 11625 MWF 10:00-10:50(03) (L. Depuydt)

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 21238 MWF 10:00-10:50(03) (L. Depuydt)

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 15625 TTh 10:30-11:50(09) (J. Allen)

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 16646 MWF 12:00-12:50(12) (L. Bestock)

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 26393 MWF 12:00-12:50(05) (L. Depuydt)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public.P_Main).
Fall 2010 Senior Seminar
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.

Fall 2010 Senior Seminar
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.

(Primarily for Graduates)

2210 Introduction to Coptic
Coptic, the last stage of the ancient Egyptian language, was written with essentially Greek alphabetic characters. An introduction to Sahidic, which is perhaps the best represented of the Coptic dialects. Sahidic grammar is explained, and some texts, mainly of a biblical and patristic nature, are read. Open to undergraduates with the consent of the instructor. No prerequisites, but a knowledge of Middle Egyptian or Greek would be helpful.

Fall EGYT2210 S01 16647 'To Be Arranged' (L. Depuydt)

2310 History of the Ancient Egyptian Language
Diachronic survey of ancient Egyptian from Old Egyptian through Coptic, covering changes in phonology and grammar and analyzing the processes through which these changes took place. Course requirements are short research papers to be presented in class and a final examination. Previous course work in at least one stage of the Egyptian language required; knowledge of Late Egyptian, Demotic (grammar) or Coptic preferable. Prerequisites: EGYT 1310 and EGYT 1320, plus either EGYT 2210, EGYT 2410 or EGYT 2610.

Spr EGYT2310 S01 26394 TTh 10:30-11:50(09) (J. Allen)

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 11626 'To Be Arranged'
Spr EGYT2970 S01 21239 'To Be Arranged'

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.

Fall; Spr

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 11627 'To Be Arranged'
Spr EGYT2990 S01 21240 'To Be Arranged'

Fall XLIST Courses of Interest to Concentrators in Egyptology
The following courses may be of interest to Egyptology concentrators. Please see the sponsoring department for the time and location of each course.

Anthropology
ANTH 1151 Ethnographies of the Middle East
ANTH 2540 Historical Archaeology

Institute for Archaeology and the Ancient World
ARCH 0100 Field Archaeology in the Ancient World
ARCH 1710 Architecture and Memory
ARCH 2340 The Archaeology of the Assyrian Empire: Cities, Landscapes and Material Culture

Spring XLIST Courses of Interest to Concentrators in Egyptology
The following courses may be of interest to Egyptology concentrators. Please see the sponsoring department for the time and location of each course.

Anthropology
ANTH 2320 Ideology of Development

Institute for Archaeology and the Ancient World
ARCH 0150 Introduction to Egyptian Archaeology and Art
ARCH 1475 Petra: Ancient Wonder, Modern Challenge
ARCH 1600 Archaeologies of the Near East

Engineering

(Primarily for Undergraduates)

0020 Transforming Society-Technology and Choices for the Future
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. Students MUST register for a conference, and a lecture section.

Spr ENGN0020 S01 21400 MWF 10:00-10:50(03) (K. Haberstroh)

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 and optics. Laboratories and design projects are included. Prerequisite: one of the following: APMA 0330, 0340, 0350, 0360, MATH 0100, 0170, 0180, 0190, 0200, 0350, 0520, 0540, which may be taken concurrently.

Students MUST register for the course lecture (S01) and one of the conferences (C01-C06) 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 S01 11963 TTh 9:00-10:20(08) (R. Clifton)

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. Students MUST register for a common meeting, and a lecture section.

Spr ENGN0040 M01 21406 TTh 9:00-10:20 (A. Bower)
Spr ENGN0040 S01 21407 MWF 9:00-9:50(08) (A. Bower)
Spr ENGN0040 S02 21409 MWF 10:00-10:50(08) (A. Bower)
Spr ENGN0040 S03 21411 MWF 11:00-11:50(08) (A. Bower)
Spr ENGN0040 S04 21412 MWF 1:00-1:50(08) (A. Bower)
Spr ENGN0040 S05 23624 MWF 2:00-2:50(08) (A. Bower)

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 11971 TTh 1:00-2:20(15) (B. Hazeltine)
Fall ENGN0090 S02 11972 TTh 2:30-3:50(15) (B. Hazeltine)
Fall ENGN0090 S03 13892 TTh 6:30-7:50(15) (B. Hazeltine)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
0120 First Year Seminar
Enrollment limited to 20 first year students.

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 24 first year students. FYS

Spr ENGN0120A S01 21414 MWF 11:00-11:50(04) (R. Fleeter)

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 create 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 24 first year students. FYS

Spr ENGN0120B S01 26121 MWF 2:00-2:50(07) (R. Fleeter)

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 11975 ‘To Be Arranged’ (C. Bull)
Spr ENGN0260 S01 25661 ‘To Be Arranged’ (C. Bull)

0310 Mechanics of Solids and Structures
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. Students MUST register for a common meeting, and a lecture section.

Fall ENGN0310 M01 11976 MWF 9:00-9:50 (V. Shenoy)
Fall ENGN0310 S01 11977 Th 1:00-2:20(02) (V. Shenoy)
Fall ENGN0310 S02 11978 Th 2:30-3:50(02) (V. Shenoy)

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, optical, and magnetic properties of materials; strengthening mechanisms in solids and relationships between microstructure and properties; corrosion and oxidation.

Lectures, recitations, laboratory. Prerequisites: CHEM 0330 or 0100. Students MUST register for a common meeting, and a lecture section.

Fall ENGN0410 M01 11995 M 11:00-11:50 & TTh 9:00-10:20 (B. Sheldon)
Fall ENGN0410 S01 11998 W 11:00-11:50(08) (S. Kumar)
Fall ENGN0410 S02 11999 W 9:00-9:50(08) (S. Kumar)

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 0400 or PHYS 0160 (previously 0080); MATH 0140 or 0200; and APMA 0330 or 0350 (may be taken concurrently). Students MUST register for a common meeting, and a lecture section.

Fall ENGN0510 M01 12000 MWF 10:00-10:50 (R. Zia)
Fall ENGN0510 S01 12002 T 10:30-11:50(03) (R. Zia)
Fall ENGN0510 S02 12003 T 1:00-2:20(03) (R. Zia)
Fall ENGN0510 S03 12004 Th 10:30-11:50(03) (R. Zia)
Fall ENGN0510 S04 12005 Th 1:00-2:20(03) (R. Zia)

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: APMA 0330 or 0350. Students MUST register for a common meeting, and a lecture section.

Spr ENGN0520 M01 21453 MWF 10:00-10:50 (B. Kimia)
Spr ENGN0520 S01 21454 T 9:00-10:20(03) (B. Kimia)
Spr ENGN0520 S02 21455 T 1:00-2:20(03) (B. Kimia)
Spr ENGN0520 S03 21456 Th 9:00-10:20(03) (B. Kimia)
Spr ENGN0520 S04 21457 Th 1:00-2:20(03) (B. Kimia)

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. Students MUST register for a common meeting, and a lecture section.

Spr ENGN0720 M01 21458 TTh 10:30-11:50 (J. Calo)
Spr ENGN0720 S01 21460 W 3:00-3:50(09) (J. Calo)
Spr ENGN0720 S02 21463 W 2:00-2:50(09) (J. Calo)

0810 Fluid Mechanics

Fall ENGN0810 M01 12039 MWF 1:00-1:50 (P. Vlahovska)
Fall ENGN0810 S01 12046 Th 4:00-4:50(06) (P. Vlahovska)
Fall ENGN0810 S02 12047 Th 12:00-12:50(06) (P. Vlahovska)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
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 0090 or MATH 0100.

Spr ENGN0900 S01 21477 TTh 1:00-2:20(15) (B. Hazeltine)
Spr ENGN0900 S02 21478 TTh 2:30-3:50(15) (B. Hazeltine)

0930 Technology and Society Course Series
Primarily for students in the liberal arts; no scientific or mathematical background is required.

0930A Appropriate Technology
Our goal for this course is that you leave it with the ability to think and act rationally and concretely 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 21480 TTh 10:30-11:50(09) (C. Bull)

(For Undergraduates and Graduates)

1000 Projects in Engineering Design
Projects in design for concentrators in chemical, electrical, materials, and mechanical engineering. Students generally work in teams on projects that are defined through discussions with the instructor. An assembled product or detailed design description is the goal of the semester's effort. Prerequisite: completion of engineering core program.

Fall ENGN1000 S01 12059 Th 4:00-5:20(13) (J. Daniels)
Spr ENGN1000 S01 21485 Th 4:00-5:20(16) (J. Daniels)

1010 The Entrepreneurial Process: Innovation in Practice
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.

Spr ENGN1010 S01 21486 TTh 10:30-11:50(09) (A. Kingon)

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 reacting 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 21487 TTh 2:30-3:50(11) (R. Hurt)

1140 Chemical Process Design
Chemical process synthesis, flowcharting, 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 21490 TTh 6:30-7:50(12) (G. Hradil)

1210 Biomechanics

Spr ENGN1210 S01 24259 MWF 1:00-1:50(06) (C. Franck)

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 23625 TTh 1:00-2:20(10) (L. Hochberg)

1230 Instrumentation Design

Fall ENGN1230 S01 12080 MWF 10:00-10:50(03) (J. Daniels)

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 21491 MWF 10:00-10:50(03)

1310 Planning and Design of Systems
Fall ENGN1310 S01 16917 MWF 11:00-11:50(04) (R. Clifton)

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 bacterial and chemical treatment processes. Prerequisite: ENGN 1810.

Spr ENGN1340 S01 21494 W 3:00-5:20(14) (M. DeFrancesco)

1360 Soil Mechanics and Principles of Foundation Engineering
Classification and identification of geological materials; mechanical and physical properties and methods of testing. Elements of the analysis of stress and strain in rock and soil masses; theories of failure, theory of...

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
seepage. Problems of building foundations; consolidation and settlement; stability of earth slopes and embankments. Includes geotechnical laboratory. Prerequisite: ENGN 0310.

Spr ENGN1360 S01 21495 M 3:00-5:20(13) (D. Carchedi)

1370 Advanced Engineering Mechanics
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 21497 TTh 9:00-10:20(08)

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 12090 TTh 6:30-7:50(12) (D. Odeh)

1400 Analytical Methods in Biomaterials
Analytical methods and instrumentation currently used to characterize biomaterials. Specific methods/instrumentation covered include: molecular scale analysis (NMR, FTIR, UV-Vis spectroscopy); surface analysis (AFM, SEM, XPS, contact angle goniometry, ellipsometry, quartz crystal microbalance, electrochemistry, grazing angle IR); bulk analysis (DSC, mechanical testing) and biological analysis (biosassays, florescence and confocal microscopy). Prerequisites: CHEM 0350, ENGN 0040 and BIOL 0200.

Fall ENGN1400 S01 16918 W 3:00-5:20(14) (G. Palmore)

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 12091 MW 4:00-5:20(13) (D. Paine)

1420 Kinetics Processes in Materials Science and Engineering
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 21499 TTh 9:00-10:20(08) (B. Sheldon)

1440 Mechanical Properties of Materials
 Begins with basic concepts of mechanical properties common to all materials, with some emphasis on dislocation theory. Particular attention is given to the relationship between mechanical properties and microstructures. The different types of mechanical tests that are used in each of these fields are analyzed. Lectures plus laboratories. Prerequisite: ENGN 0410.

Spr ENGN1440 S01 26670 TTh 10:30-11:50(09) (S. Kumar)

1470 Structure and Properties of Nonmetallic Materials
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. Laboratory. Prerequisite: ENGN 0410.

Fall ENGN1470 S01 15833 TTh 6:00-7:20(12)

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 13164 W 3:00-5:20(14) (T. Webster)

1560 Applied Electromagnetics
Developing a good understanding of the principles of classical electromagnetics as well as an ability to handle contemporary EM topics and problems. Enhancing and enriching our understanding and analytic ability through applications to examples pertinent to today’s engineering: display optics (from LCD to Peacock feather coloration), antenna (from cell phone to Moth’s antennae), sensing and photovoltaic optics (from solar cells to photodiodes), guided waves (from coaxial cable to microwave oven to optical fiber), diffraction, scattering, interference, and grating optics (from optical lithography limit to photonic crystals), and optical properties of materials and engineered structures at nanoscales. Prerequisite: ENGN 0510 or PHYS 0470 or equivalent good first course in Electricity and Magnetism.

Fall ENGN1560 S01 15834 MWF 12:00-12:50(12) (J. Xu)

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 12105 MWF 1:00-1:50(06) (G. Taubin)

1580 Communication Systems
Analysis and design of modern digital communication systems. Includes: sampling theorem; entropy measure of signal information content; pulse code modulation; amplitude and single sideband modulation; review of probability theory; stochastic processes and their use in communication systems; detection of signals buried in noise; communication channel capacity; coding principles; communication networks. Laboratory projects. Prerequisite: ENGN 1570. APMA 1650 or MATH 1610 helpful but not required.

Spr ENGN1580 S01 21532 MW 8:30-9:50(02) (D. Durfee)

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, including properties of bulk semiconductors and effects at interfaces, such as pn junctions, heterostructure 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 12106 MWF 10:00-10:50(03) (A. Zaslavsky)
1600 Design and Implementation of Very Large-Scale Integrated Systems
VLSI (Very Large Scale Integration) CMOS (Complementary Metal Oxide Semiconductor) technology is the main driver of our digital revolution. The goal of the course is to learn how to design and implement VLSI digital circuits and optimize them with respect to different objectives such as area, speed, and power dissipation. Design and analysis will be carried out using computer-aided tools. Prerequisite: ENGN 1630, or instructor permission.

Spr ENGN1600 S01 21534 MWF 10:00-10:50(03)

1610 Image Understanding
Image processing is a technology experiencing explosive growth; it is central to medical image analysis and transmission, industrial inspection, image enhancement, indexing into pictorial and video databases, e.g., WWW and robotic vision. Recognition, high-speed image processing, and image compression. This senior-level undergraduate course covers theoretical underpinnings of this field and includes a series of practical MATLAB image processing projects. ENGN 1570 is recommended but not required.

Fall ENGN1610 S01 12107 MWF 2:00-2:50(07) (B. Kimia)

1620 Analysis and Design of Electronic Circuits
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 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 21535 MWF 2:00-2:50(07) (W. Patterson)

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: binary, arithmetric, 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 12108 MW 3:00-4:20(13) (W. Patterson)

1640 Design of Computing Systems
Architectures of computers with particular reference to current microprocessors, traditional computers, and vector and parallel processors. Ideas discussed include floating point arithmetic units, advanced computer arithmetic, RISC architectures, advanced memory structures, pipelining, i/O concepts, bussing, synchronous and asynchronous concepts, instruction set design, parallel processors, vector machines, computer architecture classification, high speed data transmission, and error correcting codes. Laboratory. Prerequisite: ENGN 1630 or CSCI 0310, or written permission.

Spr ENGN1640 S01 21536 MWF 1:00-1:50(06) (S. Reda)

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 12254 TTh 10:30-11:15(09) (W. Patterson)

1690 Photonics and Applications
Engineering foundations of contemporary photonics and optoelectronics, including applications to broad spectrum of technologies from internet to optical data storage, to laser material processing and biomedical engineering. Course strategy is to teach basic photonic processes and show their engineering applications in optoelectronic devices and optoelectronic systems. Topical content includes: Light as wave interference and optical waveguides, fiber optics, Modulation of light, principles of real- and electro-optics. Optical display technology. Detection of light: from photodiodes to imaging devices, to sensor technology. Holography and optical storage. Compact light sources: from LEDs to semiconductor lasers. Prerequisite: ENGN 0510.

Spr ENGN1690 S01 21537 TTh 2:30-3:50(11) (J. Xu)

1700 Applied Thermodynamics
Control volume formulations of thermodynamic principles applied to the study of compressible fluids as working fluids in engines and thermodynamic devices. Applications include compressors and turbines, gas turbines, jet, ramjet and rocket engines, steam plants, refrigeration, and internal combustion engines. Combustion and flames are also considered. Prerequisites: ENGN 0720 and 0810.

Fall ENGN1700 S01 12109 MW 11:00-11:50(04) (J. Liu)

1710 Heat and Mass Transfer

Spr ENGN1710 S01 21538 MWF 10:00-10:50(03) (S. Mandre)

1720 Design of Engines and Turbines

Spr ENGN1720 S01 23627 TTh 9:00-10:20(08) (P. Richardson)

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. Enrollment limited to 48.

Spr ENGN1740 S01 21539 TTh 1:00-2:20(10) (B. Burke)

1750 Advanced Mechanics of Solids

Fall ENGN1750 S01 12110 TTh 2:30-3:50(11) (K. Kim)

1760 Machine Design
Design of mechanical devices utilizing techniques developed in ENGN 1750. Additional subjects include material failure criteria, vibration of
multimass systems, and control systems. Corequisite: ENGN 1370. Please contact Professor Rick Fleeter for special permission.

Spr ENGN1760 S01 21540 MWF 1:00-1:50(06) (R. Fleeter)

1860 Advanced Fluid Mechanics
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 21541 MWF 11:00-11:50(04) (J. Liu)

1900 Construction of the Entrepreneurial Enterprise Framework:Frm Decision Making to Opportunity Creation
Students examine and engage with the decision making process in the modern enterprise, including investment, negotiation, and opportunity creation. This is done in an entrepreneurial context. Teams research and present orally and in writing on major class themes. Case studies, Socratic discussion models, readings, guest lectures, rhetoric and writing fellows support for videotaped oral and written business plans are utilized. Enrollment limited to 35.

Fall ENGN1900 S01 12111 M 6:00-8:30 PM(18) (J. Cohen)

1930 Special Topics in Engineering

1930B Biophotonics
Biophotonics deals with interactions between light and biological matter that combine lasers, photonics, nanotechnology, and biotechnology. The course will introduce the biology/photonics interface and discuss topics like photobiology, biosensors, bioimaging techniques, light activated therapy, microarray technology, tissue engineering with light, and bionanophotonics. Prerequisites: science and engineering background.

Fall ENGN1930B S01 13695 'To Be Arranged'

1930C Civil Engineering Project
Provides a major design experience for civil engineering students. This experience involves an open-ended design problem that requires teamwork and the integration of understanding developed in upper-level courses in civil engineering concentration. Intended for students in their senior year. Offered as a half-credit course each semester.

Fall ENGN1930C S01 12112 'To Be Arranged’ (R. Clifton)

1930D Civil Engineering Project
Provides a major design experience for civil engineering students. This experience involves an open-ended design problem that requires teamwork and the integration of understanding developed in upper-level courses in civil engineering concentration. Intended for students in their senior year. Offered as a half-credit course each semester.

Spr ENGN1930D S01 21542 'To Be Arranged’ (R. Clifton)

1930F Entrepreneurship and Good Work: Engineering Dreams
In this course, students examine the concepts of creation, organization, promotion, management and risk of ownership, to wit: entrepreneurship. This is done in the context of 'good work'. Using a combination of relevant case studies, readings, guest lectures and discussion, each participant builds a theory and framework to explore what defines innovative and meaningful engagement during one's working years. Written permission required.

Spr ENGN1930F S01 21543 W 2:30-5:20(14) (J. Mittelmann)

1930G Entrepreneurship I
Teams of students from Engineering, COE and other technical and non-technical disciplines form simulated high tech startup companies working on mentor-defined opportunities, from conception to commercialization. Intellectual property, marketing, definition of a product requirements document, human factors (including team building), safety and environmental concerns, and legal concerns are emphasized. Students in the COE Technology Management Track should complete ENGN 1010 prior to this course. Enrollment in the course is limited and students must fill out a formal application (though COE tech track seniors are automatically approved). The course meets TR from 2:30-3:50, and other outside meeting hours will be arranged. Enrollment limited to 24. WRIT

Fall ENGN1930G S01 12116 TTh 2:30-3:50(11) (S. Petteruti)

1930H Entrepreneurship II
Please see ENGN 1930G for course description. Enrollment limited to 24. WRIT

Spr ENGN1930H S01 21544 TTh 2:30-3:50(11) (S. Petteruti)

1930L Biomedical Engineering Design, Research and Modeling
This course introduces students to design, modeling and analysis of biological systems. The first portion of the course focuses on linear systems. Research projects in design will be analyzed. The course also introduces students to the Matlab programming language, which allows them to implement the design models discussed in class. For seniors only.

Fall ENGN1930L S01 16059 MW 8:30-9:50(02) (A. Tripathi)

1930M Industrial Design
Brown engineering and RISD industrial design faculty lead product development teams through a design cycle. Engineers explore industrial design, designers gain some insight into engineering, and both groups can apply their skills to challenging problems. Frequent presentations, field trips, critiques, and labs. Preference given to seniors. Prerequisites: completion of engineering core. Enrollment limited to 15 students.

Fall ENGN1930M S01 12122 'To Be Arranged’ (C. Bull)

1930Q Social Entrepreneurship
Perspectives, scope, and direction of social entrepreneurship- creating sustainable organizations that accomplish social goals. Exploring a philosophy and establishing a mission. Case studies of social entrepreneurs. Planning, including strategy, finances, people, and implementation. Readings, guest lectures, and case studies. Students will develop plan for a new organization. Seminar.

Fall ENGN1930Q S01 12125 TTh 9:00-10:20(08) (C. Bull)

1930S Land Use and Built Environment: An entrepreneurial view
Through the use of readings, group discussions, students presentations and guest lectures, students examine and challenge the analytical and structural frameworks which underlie and support public and private land and use the urban and suburban built environments. Students build an understanding and theory of how social, political, governmental and economic forces interact with society's present and future physical space needs. Instructor's permission required. Enrollment Limited to 24.

Fall ENGN1930S S01 13218 W 9:00-11:50(02) (J. Mittelmann)

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 23655 TTh 2:30-3:50(11) (C. Bull)
1930V Engineers of the Future: Architects of Dreams
Students integrate fundamentals of Engineering with the broader spectrum of learning needed to continuously create, capture and sustain value in a constantly changing world. Renewable energy; water; green-building; global-warming and infrastructure are examples of needs examined from multiple approaches in cultural contexts. Participants learn to think dynamically across diverse domains while gaining mastery over distinctions that power successful problem-solving. Instructor’s permission required.

Fall ENGN1930V S01 13219 TTh 1:00-2:20(10) (J. Mittlemann)

1930W The Art and Science of Light
This studio course explores artificial light from both artistic and scientific perspectives. Laboratory demonstrations on optics and new light emitting materials will be counterbalanced by presentations on the historical and contemporary integration of these materials within the fields of architecture, industrial design, and sculpture. Students will be asked to reimagine the light bulb by developing artistic design alternatives to conventional lighting. Extensive outside work is expected. Written permission required.

Spr ENGN1930W S01 26671 MWF 12:00-12:50(05) (R. Zia)

1930X Entrepreneurship and New Ventures: A Socratic Approach to Innovation Analysis and Application
Taught via Socratic method, this course will use case studies that explore essential elements of the entrepreneurial process: Defining Entrepreneurship; Recognizing Opportunities and Developing Business Models; Assembling The Team; Raising Financial Resources; Managing Uncertainty; Managing the Growing Venture; and Realizing Value. Guests will include successful entrepreneurs and expert practitioners who will highlight practical approaches to entrepreneurial success.

Please note that beginning with the very first class, students MUST read the session's case study and supplemental readings, to be ready for participation in discussions. For the first day's assignment, please contact Professor Warshay directly at Daniel.Warshay@brown.edu. Enrollment limited to 35.

Fall ENGN1930X S01 13753 TTh 10:30-11:50(09) (D. Warshay)

1930Z Robot Design

Spr ENGN1930Z S01 24375 MWF 11:00-11:50(04) (J. Daniels)

1931A The Physics of Solar Cells
To help students build a solid knowledge of the fundamental physical processes occurring in conventional and unconventional solar cells. This seminar course will provide an overview of the state of the art of solar energy harvesting, solar cell designs and characterization. Recommended prerequisites: Good knowledge of basic physics and electromagnetism concepts; proficiency in ENGN 0510 or PHYS 0470; familiarity with Mathematica and/or Matlab. 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 solar cell technologies.

Spr ENGN1931A S01 25665 W 3:00-5:20(14) (D. Pacitti)

1971 Independent Study in Engineering
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. Instructor’s permission required.

Fall

(Primarily for Graduates)

2010 Mathematical Methods in Engineering and Physics I
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.

Fall ENGN2010 S01 14468 TTh 10:30-11:50(09)

2020 Mathematical Methods in Engineering and Physics II
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 21545 TTh 9:00-10:20(08)

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 12141 W 3:00-5:50(14) (E. Suuberg)

2120 Business Engineering Fundamentals II
The course examines core concepts in distinct areas through three modules: (1) 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 21546 W 3:00-5:50(14) (E. Suuberg)

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 12142 T 3:00-5:20(13) (R. Petteruti)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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 21548 T 3:00-5:20(16) (R. Petteruti)

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 15837 M 3:00-5:50(13) (A. Kincon)

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 25915 M 3:00-5:50(13) (A. Kincon)

2180 Globalization Immersion Experience and Entrepreneurship Laboratory
In this course, students will gain a better understanding of the political, social and cultural dynamics that influence entrepreneurial enterprises in different world regions. Meetings will be arranged with high technology companies and their venture arms, academic incubators, investment professionals, legal professionals, government officials, entrepreneurs, and other university faculty and students. The semester becomes a global entrepreneurship and innovation "laboratory" where students experience and take part in guest lectures from experts working in other countries. Classroom discussions, student presentations, papers and readings will be used to focus and further understand the globalization dynamic and its relationship to entrepreneurship. Prerequisite: ENGN 2110. Enrollment limited to graduate students in the PRIME program.

Spr ENGN2180 S01 24935 Th 3:00-5:50(16) (J. Mittlemann)

2210 Continuum Mechanics

Fall ENGN2210 S01 12143 MW 8:30-9:50(02) (J. Blume)

2220 Mechanics of Solids

Spr ENGN2220 S01 21550 TTh 10:30-11:50(09) (P. Guduru)

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 elastic-plastic problems, uniqueness. Upper and lower bounds, theorems of limit analysis and Tresca's yield theory. Representative problems in structural analysis, metal forming, indentation, strain and stress concentrations at notches, and ductile failure.

Fall ENGN2290 S01 16919 MWF 2:00-2:50(07) (H. Gao)

2320 Experimental Mechanics
The design and evaluation of experiments in solid mechanics. Considers methods for experimental stress analysis and for the mechanical testing of materials. Topics covered include photoelasticity, creep and relaxation tests, high-speed testing, stress wave propagation, fatigue, and fracture. Techniques, instrumentation, and recording systems for the static and dynamic measurement of mechanical parameters such as forces, displacements, velocities, accelerations, and strains.

Spr ENGN2320 S01 26672 MWF 9:00-9:50(02) (K. Kim)

2340 Computational Methods in Structural Mechanics

Fall ENGN2340 S01 16920 MW 8:30-9:50(02) (A. Bower)

2400 Electron Microscopy in Materials Science
Theory of electron optics and principles of transmission electron microscopy, including dynamical theory of electron diffraction and image contrast. Applications to materials analysis including defect, boundary, and phase analysis. Analytical electron microscopy including convergent beam diffraction, energy dispersive x-ray analysis, and energy loss spectroscopy. Intensive laboratory exercises.

Spr ENGN2400 S01 26673 MWF 10:00-10:50(03) (D. Paine)

2410 Thermodynamics of Materials

Fall ENGN2410 S01 12172 MW 4:00-5:20(13) (D. Paine)

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 21554 TTH 9:00-10:20(08) (B. Sheldon)

2430 Deformation Behavior of Materials
Linear elasticity as applied to isotropic and anisotropic materials; yield criteria including Von Mises, Tresca, Mohr-Coulomb, and Hill. Plastic deformation and slip. Dislocation theory. Mechanisms of hardening. Microstructural models of ductile, intergranular, and cleavage fracture. Toughening mechanisms. Creep. Fatigue. Prerequisites: ENGN 0410 and ENGN 1440 or equivalent.

Spr ENGN2430 S01 26674 TTh 1:00-2:20(10) (S. Kumar)

2490 Special Topics in Materials Science

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 16921 TTH 9:00-10:20(08) (E. Chason)

2530 Digital Signal Processing
An introduction to the basics of linear, shift invariant systems and signals. 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 12175 MWF 11:00-11:50(04) (H. Silverman)

2540 Speech Processing
The basics for speech production and hearing are introduced. PDEs and simplified vocal-tract models are derived. LPC, DFT filterbank and time varying signal processing for speech recognition analysis are discussed in mathematical detail. Dynamic programming, vector quantization, hidden Markov modeling, and neural-network pattern recognition for speech are introduced. Offered every other year.

Spr ENGN2540 S01 26676 MWF 11:00-11:50(04) (H. Silverman)

2560 Computer Vision
An interdisciplinary exploration of the fundamentals of engineering computer vision systems (e.g., medical imaging, satellite photo interpretation, industrial inspection, robotics, etc.). Classical machine vision paradigms in relation to perceptual theories, physiology of the visual context, and mathematical frameworks. Selections from Gestalt psychology, Gibsonian approach primate visual pathways, edge-detection, segmentation, orientation-selectivity, relaxation-labeling, shading, texture, stereo, shape, object-recognition.

Spr ENGN2560 S01 26677 TTH 1:00-2:20(10)

2600 Electronic Processes in Semiconductors
Electronic processes primarily in semiconductors with tetrahedral bonding (Si, Ge, GaAs compounds). Topics include phonon spectra, band structure, impurity states, electron and hole distributions, optical properties, electron transport, scattering processes, excess and hot carriers, semiconductor-metal transitions, one-and-two-dimensional electron gas, and amorphous semiconductors. Prerequisite: PHYS 2410 or equivalent.

Fall ENGN2600 S01 16922 TTH 10:30-11:50(09) (A. Nummikko)

2610 Physics of Solid State Devices
Current and proposed semiconductor devices: bipolar transistors (silicon and heterojunction); field effect transistors (MOSFETs, heterostructure, and submicron FETs); hot-electron and quantum-effect devices; and photonic devices (LEDs, semiconductor lasers, and photodetectors). Prerequisites: EN 159 or equivalent introductory device course; some quantum mechanics helpful but not required.

Spr ENGN2610 S01 26678 MWF 10:00-10:50(03) (A. Zaslavsky)

2640 Classical Theoretical Physics II (PHYS 2040)
Interested students must register for PHYS 2040 S01 (CRN 21706).

2730 Advanced Thermodynamics I
Fundamental principles of macroscopic equilibrium; thermodynamic stability; Gibbs relations and chemical thermodynamics; applications to various systems, including fluids, solids, and magnetic and dielectric materials. Fundamental principles of macroscopic nonequilibrium thermodynamics (irreversible processes). Entropy production; Curie’s principle; Onsager-Casimir reciprocal relations; applications to transport and relaxation phenomena in continuous systems.

Fall ENGN2730 S01 12178 MWF 11:00-11:50(04) (P. Richardson)

2760 Heat and Mass Transfer

Spr ENGN2760 S01 26679 TTh 1:00-2:20(10) (P. Vlahovska)

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 13696 MWF 10:00-10:50(03)

2910 Special Topics in Engineering

2910G Topics in Translational Research and Technologies
To improve human health, engineering and scientific discoveries must be explored in the context of application and translated into human/societal value. Translational research is creating a fundamental change in the way basic science and engineering research has operated for decades, breaking down the literal and figurative walls that separate basic scientists/engineers and clinical researchers. Such discoveries typically begin at "the bench" with basic research―and in the case of medicine―then progress to the clinical level, or the patient's "bedside." This seminar course will utilize case studies to demonstrate to students how the translational research unfolds. Lectures will be delivered by clinicians, medical researchers, engineers, and entrepreneurs, with case studies focused on topics ranging from value creation, IRB, HIPAA, FDA approval, etc.

Spr ENGN2910G S01 23704 F 3:00-5:20(15) (G. Jay)

2910K Cell Mechanics
Course is designed for students with a strong background that want to learn more about mathematical and mechanical descriptions of the cell and its functions. It will include an overview of cell biology emphasizing locomotion, mitosis (cell division), intracellular transport, cellular mechanotransduction, and biological material properties. The course will draw examples from recent theoretical and experimental research investigations, and teach quantitative tools commonly used by engineers in the field.

Fall ENGN2910K S01 16923 MWF 1:00-1:50(06) (C. Franck)
domains will also be described. These include computer vision, image processing, reconfigurable computing. Mapping specific algorithms from different design tools. The class will show a class of algorithmic techniques for hardware and communication asset exploitation.

This course is relevant for graduate students interested in environmental pollution chemistry. Undergraduates need permission of the instructor to register.

2910L Chemical and Transport Processes in the Environment
This course will cover fundamental properties and processes that are important for the fate and transport of chemicals in the environment. Topics will include acid/base speciation, complexation, sorption, phase-partitioning, and solution chemistry. Emphasis will be placed on natural and engineered environmental systems, including a range of environmentally relevant media (e.g. water, air, soil/sediments, plants, organisms). Conceptual understanding of chemical structure and its role in environmental transport will be highlighted, while quantitative approaches will be used to solve problems.

This course is relevant for graduate students interested in environmental pollution chemistry. Undergraduates need permission of the instructor to register.

2910O Molecular Simulation Methods in Mechanics and Physics
Random numbers in molecular simulations, Monte Carlo methods applied to equilibrium systems, Kinetic Monte Carlo methods, Molecular dynamics with simple potentials - equilibrium properties in various ensembles (ENV,NVT,NPT,NoT) and non-equilibrium properties. Simulations with three-body potentials and EAM potentials. Molecular statics. Introduction to quantum mechanical methods, Application to the above methods to defect interactions in solids, structure of surfaces, crystal growth and structure of nanostructures.

2910Y Innovation and Entrepreneurship: Creating Value Out of Graduate Research
The course focuses on innovation and entrepreneurship of embryonic ideas, pioneering technologies and scientific breakthrough emanating from the university research enterprise. All assignments will center on your graduate research, culminating with a full business plan. The course is unique in this way for you to remain focused on your graduate work, while simultaneously harvesting the commercial potential of your research.

2911X Reconfigurable Computing: Accelerate Your Algorithms
Driven by recent innovations in Field-Programmable Gate Arrays (FPGAs), reconfigurable computing offers unique ways to accelerate key algorithms. FPGAs offer a programmable logic fabric that provides the necessary hardware and communication assets to exploit parallelism opportunities arising in various algorithms. By mapping algorithms directly into programmable logic, FPGAs accelerators can deliver 10X-100X performance increases over generic processors for a large range of application domains. The class will describe FPGA architectures, reconfigurable systems, languages (SystemC) and design tools. The class will show a class of algorithmic techniques (e.g., dynamic programming) that are particularly attractive targets for reconfigurable computing. Mapping specific algorithms from different domains will also be described. These include computer vision, image and signal processing, network security, and bioinformatics algorithms. The class requires basic hardware and programming languages knowledge.

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.

2912E Low Power VLSI System Design
This course deals with the design of digital systems for low power dissipation. Issues that will be addressed include CMOS power dissipation, analysis and design tools used for lower power digital circuits, design methodologies for low power CMOS circuits, low power architecture designs, and a discussion on future challenges in low power digital design. Prerequisites: familiarity with basic MOSFET structure and computer architecture principles; some circuit analysis helpful.

Spr ENGN2912E S01 26681 MW 8:30-9:50(02) (R. Bahar)

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

Fall ENGN2970 S01 12181 'To Be Arranged'
Spr ENGN2970 S01 21562 'To Be Arranged'

2980 Special Projects, Reading, Research and Design
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.
Fall; Spr

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

Fall ENGN2990 S01 12182 'To Be Arranged'
Spr ENGN2990 S01 21563 'To Be Arranged'

2990L 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 ENGN2990L S01 12181 'To Be Arranged'
Spr ENGN2990L S01 21562 'To Be Arranged'

Fall XLIST Courses of Interest to Student Concentrating in Engineering
The following related courses, offered in other departments, may be of interest to students concentrating in Engineering. Please see the course listing of the sponsoring department for location and time.

Applied Math
APMA 1210 Operations Research: Deterministic Models
APMA 1710 Information Theory

Spring XLIST Courses of Interest to Student Concentrating in Engineering
The following related courses, offered in other departments, may be of interest to students concentrating in Engineering. Please see the course listing of the sponsoring department for location and time.

Applied Math
APMA 2420 Fluid Dynamics II

Chemistry
CHEM 2020 Statistical Mechanics

Physics
PHYS 2040 Classical Theoretical Physics II

English for Internationals see Center for Language Studies

English
(Primarily for Undergraduates)

0100 Introduction of Modernism
Designed to introduce students to literary modernism, this course will approach modernism as a formative social, historical and artistic moment. Students will both read modernist literary works and explore
the culture of modernism. Questions asked will be: what is the interaction between the visual arts and literature? How can we think about the relationship between modernism and political movements of the early-twentieth century, especially Fascism? And, finally, how can we track the influences and echoes of modernism throughout the twentieth century? Authors include T.S. Eliot, Virginia Woolf, James Joyce and Katherine Mansfield.

Sum ENGL0100 S01 60439 MWF 1:00-3:40 (H. Sikorski)

0110 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. Fall sections 5, 6, 7, and 10 are reserved for first-year students. Banner registrations after classes begin require instructor approval. S/NC.

Sum ENGL0110 S01 60283 MTWTh 9:00-11:00 (J. Zysk)
Fall ENGL0110 S01 11414 MWF 11:00-11:50(18) (L. Stanley)
Fall ENGL0110 S02 11464 TTh 9:00-10:20(18)
Fall ENGL0110 S03 11465 TTh 2:30-3:50(18)
Fall ENGL0110 S04 11466 TTh 9:00-10:20(18)
Fall ENGL0110 S05 11467 MWF 1:00-1:50(18)
Fall ENGL0110 S06 11468 MWF 12:00-12:50(18)
Fall ENGL0110 S07 11469 MWF 9:00-9:50(18)
Fall ENGL0110 S08 11470 MWF 12:00-12:50(18)
Fall ENGL0110 S09 11471 MWF 9:00-9:50(18)
Fall ENGL0110 S10 11472 MWF 10:00-10:50(18)
Fall ENGL0110 S11 11473 MWF 9:00-9:50(18)
Fall ENGL0110 S12 11474 MW 8:30-9:50(18)
Fall ENGL0110 S13 14599 MWF 1:00-1:50(18)
Spr ENGL0110 S01 21067 MWF 11:00-11:50(18)
Spr ENGL0110 S02 21068 MWF 2:00-2:50(18)
Spr ENGL0110 S03 21069 MWF 12:00-12:50(18)
Spr ENGL0110 S04 28279 MWF 9:00-9:50(18)

0130 Critical Reading and Writing II: The Research Essay
For the confident writer. Offers students who have mastered the fundamentals of the critical essay an opportunity to acquire the skills to write a research essay, including formulation of a research problem, use of primary evidence, and techniques of documentation. Individual section topics are drawn from literature, history, the social sciences, the arts, and the sciences. Enrollment limited to 17. Writing sample may be required. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL0130 S01 11415 MWF 2:00-2:50(18)
Fall ENGL0130 S02 11475 MWF 1:00-1:50(18) (E. Taylor)
Fall ENGL0130 S03 15398 TTh 2:30-3:50(18)
Spr ENGL0130 S01 21070 TTh 2:30-3:50(18)
Spr ENGL0130 S02 21071 MWF 12:00-12:50(18)

0160 Journalistic Writing
An introduction to journalistic writing that focuses on techniques of investigation, reporting, and feature writing. Uses readings, visiting journalists, and field experience to address ethical and cultural debates involving the profession of journalism. Writing assignments range from news coverage of current events to investigative feature articles. Writing sample required. Class list will be reduced to 17 after writing samples are reviewed during the first week of class. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL0160 S01 11416 MW 3:00-4:20(13)
Fall ENGL0160 S02 11476 TTh 9:00-10:20(08)
Spr ENGL0160 S01 21072 MW 8:30-9:50(02)

0180 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 ENGL1180. Writing sample may be required. Enrollment limited. Banner registrations after classes begin require instructor approval. S/NC.

Sum ENGL0180 S01 60284 MTWTh 4:00-6:00 (K. Miller)
Fall ENGL0180 S01 11417 TTH 9:00-10:20(08)
Fall ENGL0180 S02 11477 MWF 9:00-9:50(02)
Fall ENGL0180 S03 11478 MWF 9:00-9:50(02)
Fall ENGL0180 S04 11479 MWF 8:30-9:50(02)
Fall ENGL0180 S05 11480 MWF 11:00-11:50(04)
Spr ENGL0180 S01 21073 TTh 9:00-10:20(08)
Spr ENGL0180 S02 21074 MWF 10:00-10:50(03)
Spr ENGL0180 S03 21075 MWF 1:00-1:50(06)
Spr ENGL0180 S04 21076 MWF 9:00-9:50(02)
Spr ENGL0180 S05 23220 MWF 2:00-2:50(07)
Spr ENGL0180 S06 23221 MWF 12:00-12:50(05)
Spr ENGL0180 S07 23662 MWF 9:00-9:50(02)

0200 Seminars in Writing, Literatures, and Cultures
Offers students a focused experience with reading and writing on a literary or cultural topic. Requires 18-20 pages of finished critical prose dealing with the literary, cultural, and theoretical problems raised. Course goal is to improve students’ ability to perform close reading and textual analysis. Enrollment limited to 17.

0200V Shakespeare Rewrites Shakespeare
How did Shakespeare’s drama develop thematically, rhetorically, and historically over the span of his literary career? This course offers students a representative introduction to Shakespeare’s work, paying particular attention to how later plays reinvent linguistic, historical, and theatrical materials worked out in earlier plays. Plays include Othello and Titus Andronicus and Two Gentlemen of Verona and Titus Andronicus and Hamlet. Requirements include critical essays, an in-class presentation, and a final examination. Enrollment limited to 17.

Sum ENGL0200V S01 60316 TTh 1:30-5:30 (J. Zysk)

0201B Rebels with a Cause: The Figure of the Rebel from Marlowe to Milton
Examines representations of the rebel in early modern literature as a figure who is fundamental to definitions of social order. To what extent is the rebel integral to the social, political, and sexual structures s/he challenges? What do God and Satan, king and traitor, Puritan and sodomite have in common? Readings include Marlowe, Kyd, Shakespeare, Middleton, Webster, Marvell, Hobbes, and Milton. Enrollment limited to 17 undergraduate students.

Fall ENGL0201B S01 16820 MWF 9:00-9:50(02) (J. Beaver)

0201C Birds, Beasts, and Bots: American Literature between the Wild and the Wired
19th- and 20th-century American writers have often contemplated the relation of human beings to nature and machinery. This course examines the diverse ways American writers of this period have represented human interactions with natural elements (animals, wilderness) and artificial components (robots, factories, cities). We will focus especially on the question of whether human life is characterized in these texts as increasingly natural or programmed. Readings include works by Thoreau, Dickinson, Crane, London, Sinclair, Stevens, Eliot, Bradbury, Dick, and Dillard. Enrollment limited to 17 undergraduate students.

Spr ENGL0201C S01 26570 MWF 11:00-11:50(04) (S. Keck)

0201D Feeling Queerly
Explores “queerness” in American and European literature from the late nineteenth to the mid-twentieth century. Analyzes the ways that a range of embodied feelings and emotional states (like shame, disgust, envy, embarrassment, and passivity) shapes formal aspects of literary works and effectively hinders speech, action, and self-expression. Authors include Melville, Woolf, Stein, Beckett, Baldwin, Crane, Genet. Enrollment limited to 17 undergraduate students.
0201E World Wide: Globalization from Shakespeare to Rushdie
Explores the idea of globalization and its resonances with 17th and 18th century conceptions of a global network. How did early modern authors treat the ideas of cosmopolitanism, competing loyalties between home and the world, conflicts between self and other? How do contemporary authors take up or respond to these issues? Readings include Shakespeare, Milton, Dryden, Swift, Kant, Amin, Ghosh, and Salman Rushdie. Enrollment limited to 17 undergraduate students.

0201F Ravishing Verse: The Lyric and Spiritual Crisis
This seminar explores the tension between the language of the spiritual and the language of the sensual in lyric poetry. How does a poet's inner struggle over questions of belief engage the individual with the larger community; how does this struggle confront the lyric tradition? Poetry and prose readings will include Spenser, Donne, Herbert, Marvell, Milton, Hopkins, Mahon, and Longley. Enrollment limited to 17 undergraduate students.

0201G Killing them Softly: Satire and Stereotype in African-American Literature
Examines the possibilities and limitations of satire within the field of 20th-century African-American literature. We will consider the ways in which the satirical form is deployed by writers seeking to examine questions of authenticity, community, and stereotypical representation. Authors include Schuyler, Ellison, Killens, Reed, Beatty, and Everett. Screenings of works by Spike Lee and Dave Chappelle. Enrollment limited to 17 undergraduate students.

0210 Introductory General Topics in Medieval and Early Modern Literatures and Cultures
These introductory general topics courses are designed to give students a coherent sense of the literary history and the major critical developments during a substantial portion of the period covered by the department's Area I research field: Medieval and Early Modern Literatures and Cultures. English concentrators are required to take at least one of these courses to apply toward the Area I English concentration requirements.

0210F Beowulf to Aphra Behn: The Earliest British Literatures
Major texts and a few surprises from literatures composed in Old English, Old Irish, Anglo-Norman, Middle English, and Early Modern English. We will read texts in their historical and cultural contexts. Texts include anonymously authored narratives like Beowulf and Sir Gawain and the Green Knight, selected Canterbury Tales by Chaucer, and texts by Sir Thomas Malory, Spenser, Shakespeare, and Aphra Behn. Not open to seniors. Students should register for ENGL 0210F S01 and may be assigned to conference sections by the instructor during the first week of class. Enrollment limited to 20 first-year students. FYS

0250F Shakespeare's Present Tense
Shakespeare in Love suggests how Shakespeare was clued in to elite and popular cultures. Current adaptations like O and 10 THINGS I HATE ABOUT YOU demonstrate how Shakespeare provides anachronistic clues to issues of the present. This course will trace such clues by examining the cultural origins and ongoing adaptations of Romeo and Juliet, Hamlet, Othello, Twelfth Night, Henry V, and the sonnets. Enrollment limited to 20 first-year students. FYS WRIT

0250G The Green Renaissance
Modern ecological crises suggest that nature is a powerful agent, but that such views were prevalent in the renaissance, when empirical science was transforming nature into an object, needs investigation. How did renaissance poets and dramatists figure their own relationship to the natural world? We will seek answers by reading Shakespeare, Donne, Milton, and Marvel, among other writers. Enrollment limited to 20 first-year students. FYS

0400 Introductory Special Topics in Medieval and Early Modern Literatures and Cultures

0400A Introduction to Shakespeare
This course will explore issues of concern to Shakespeare's audiences from his time to ours--love, war, race, sex, good and evil--through a representative selection of plays. Lectures will discuss historical contexts, theatrical conditions, and critical strategies. Designed for students beginning college-level study of Shakespeare. Two lectures and one discussion meeting weekly. Students should register for ENGL 0400A S01 and may be assigned to conference sections by the instructor during the first week of class. LILE WRIT

0410 Introductory General Topics in the Enlightenment and the Rise of National Literatures and Cultures
These introductory general topics courses are designed to give students a coherent sense of the literary history and the major critical developments during a substantial period covered by the department's Area II research field: The Enlightenment and the Rise of National Literatures and Cultures. English concentrators are required to take at least one of these courses to apply to the Area II English concentration requirements.

0410A Literature and the Fantastic
Considers the changing ways Renaissance, Romantic, Victorian, and late-nineteenth-century authors incorporate non-realistic and fantastic themes and elements in literature. Special attention to the relationship between realism and fantasy in different genres. Readings include stories (gothic, ghost, and adventure), fairy tales, short novels, plays, and poems. Shakespeare, Swift, Brothers Grimm, Blake, Wordsworth, Coleridge, Keats, Tennyson, Robert Browning, Christina Rossetti, Stoker, Lewis Carroll, Dickens, Henry James. Two lectures and one discussion meeting weekly. Students will be assigned to conference sections by the instructor during the first week of class. Banner registrations after classes begin require instructor approval.

0450 Introductory Seminars in the Enlightenment and Rise of National Literatures and Cultures
First-year seminars limited to 20 students. FYS

0450D The Simple Art of Murder
A survey of the role of criminal enterprise in American literary history. Authors to be considered include Poe, Hawthorne, Harper, Chandler, Alcott, Twain, Hammett, Highsmith, and Wright. Limited to 20 first-year students. FYS
0450E Inventing America
One of the distinguishing features of American literature may be its seemingly constant struggle with the idea of America itself. For what, these authors wonder, does/should America stand? We will examine the rhetorical battles waged in some major works of American literature over the meaning and/or meanings of our national identity. Authors include Franklin, Hawthorne, Melville, and Fitzgerald. Limited to 20 first-year students. FYS LILE WRIT

Fall ENGL0450E S01 15846 MWF 10:00-10:50(03) (J. Egan)

0600 Introductory Topics in the Enlightenment and the Rise of National Literatures and Cultures

0600E British Romanticism
Readings in British Romantic writing, canonical and noncanonical, emphasizing how historical and political change, philosophical disposition, and subjective consciousness become articulated in verse and prose. Literary representations of and responses to the French Revolution, the Industrial Revolution, the struggle against black slavery, Blake, Wollstonecraft, Olaudah Equiano, William Wordsworth, Dorothy Wordsworth, Coleridge, Percy Shelley, Mary Shelley, Byron, Keats, Clare. WRIT LILE

Fall ENGL0600E S01 14018 TTh 2:30-3:50(11) (W. Keach)

0600K Fictions and Frauds: Literature and the Historical Imagination
How does fiction reinvent history? What makes autobiography "true"? Readings focus on the slave narrative, Hawthorne, historical novels, and Jack Kerouac’s "On the Road." Limited to undergraduates.

Spr ENGL0600K S01 26487 TTh 10:30-11:50(09) (P. Gould)

0600P Modern Fiction and the Sea
This class examines one of the most distinctive literary genres: the sea novel. Varying from stories of marvelou places and events to realistic portrayals of mutiny and shipwreck, these texts are also highly self-conscious examinations of what it means to be an eye-witness of a world irrevocably lost. Novels and films to be discussed include Lord Jim, Apocalypse Now, Moby-Dick, and The Witness.

Spr ENGL0600P S01 26575 TTh 10:30-11:50(09) (S. Burrows)

0610 Introductory General Topics in Modern and Contemporary Literatures and Cultures
These introductory general topics courses are designed to give students a coherent sense of the literary history and major critical developments during a substantial portion of the period covered by the department’s Area III research field: Modern and Contemporary Literatures and Cultures. English concentrators are required to take at least one of these courses to apply toward the Area III English concentration requirements.

Fall ENGL0610P S01 16822 MWF 2:00-2:50(07) (K. McLaughlin)

0610D Introduction to Asian American Literature
This course is intended to familiarize students with key issues that have shaped the study of Asian American writings and to provide a sense of the historical conditions out of which those works have emerged. As a literature course, it will focus on textual analysis—on how particular texts give representational shape to the social, historical and psychological experiences they depict. Readings consists primarily of works that have a canonical status within Asian American literary studies but also include newer works that suggest new directions in the field. It also strives to provide some coverage of the major ethnic groups. DVPS

Fall ENGL0610D S01 16763 MWF 10:00-10:50(03) (D. Kim)

0610E Postcolonial Literatures
Examines fiction, drama, poetry, travel writing, and cultural theory by contemporary writers from former colonies of the British Empire. We study works by Anglophone African, Caribbean, and South Asian writers. Issues include: nationalism and globalization; cultural identity and diaspora; individual interiority and collective aspirations; literary form and the very idea of "postcolonial" literature. Authors include: J. M. Coetzee, Amitav Ghosh, V. S. Naipaul, Michael Ondaatje, Caryl Phillips, Derek Walcott, Zoë Wicomb. DVPS

Spr ENGL0610E S01 26488 TTh 9:00-10:20(08) (O. George)

0610F Introduction to Modernism: Past, Future, Exile, Home
An introduction to European Modernism with an emphasis on British Literature. We will address ideas of personal and national history through literary and aesthetic innovations of the first half of the 20th century, as well as the relationship—literary, cultural, historical and psychological—between constructions of home and abroad. Texts include James, Conrad, Forster, Joyce, Proust, Woolf, Faulkner, Waugh, and Freud, as well as films by Sergei Eisenstein and Fritz Lang. Students should register for ENGL 0610F S01 and may be assigned to conference sections by the instructor during the first week of class.

Spr ENGL0610F S01 26489 MWF 11:00-11:50(04) (R. Reichman)

0610J Contemporary British Fiction
This course covers the euphoric parochialism of the post-War years, the social polarization of Thatcherism, and the multicultural inclusiveness of the New Labour period. It is intended as an introduction to theories of culture, ideology and literary form, as well as an overview of some of the most important British writers of the second half of the last century. Readings will include Kingsley, Amis, Ishiguro, McEwan, Kelman, Spark, Naipaul, Smith, Subald.

Spr ENGL0610J S01 26493 TTh 10:30-11:50(09) (T. Bewes)

0650 Introductory Seminars in Modern and Contemporary Literatures and Cultures
First-year seminars limited to 20 students. FYS

0650H 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 LILE

Fall ENGL0650H S01 11419 MWF 11:00-11:50(04) (P. Armstrong)

0650K The Roaring Twenties
The 1920s helped solidify much of what we consider modern in 20th-century U.S. culture. This course reads literature of the decade in the context of a broader culture, including film and advertising, to think about the period’s important topics: the rise of mass culture and of public relations, changes in women’s position, consumerism, nativism and race relations. Writers include Fitzgerald, Hemingway, Larsen, Toomer, Parker. Enrollment limited to 20 first-year students. FYS

Spr ENGL0650K S01 26494 TTh 9:00-10:20(08) (E. Katz)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
0910 Introductory Special Topics in Literatures and Cultures in English

0910A 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. These lines from William Carlos Williams begin to articulate the purpose of this course. The human species for thousands of years has found ways to intensify and order experience through the language of poetry. The ability to read this kind of language well is an enduring life skill. Designed for non-concentrators and English concentrators, the course addresses both conceptual and practical issues of understanding poetry. Readings draw on a wide range of British and American writers, including Wyatt, Shakespeare, Donne, Blake, Keats, Dickinson, Cummings, Frost, Bishop, and Heaney. LLE

Spr ENGL0910A S01 26495 TTh 1:00-2:20(10) (M. Rabb)

0910F Literature, Trauma, and War
This course surveys many genres and periods in order to consider and think about two traditional kinds of literary responses to war--glorifying it, and representing its horrors. We'll examine texts by Homer, Shakespeare, Milton, Wordsworth, Byron, Whitman, Hardy, Crane, Freud, Levi, Pynchon, and Sebald, among others; we may also screen one or two films. Limited to undergraduates. Students should register for ENGL 0910F S01 and may be assigned to conference sections by the instructor during the first week of class. Students MUST register for a conference, and a lecture section.Instructor’s permission required.

Spr ENGL0910F S01 26576 MWF 11:00-11:50(04) (M. Redfield)

(For Undergraduates and Graduates)

1140 Critical Reading and Writing III: Topics in Literary and Cultural Criticism
For advanced writers. Situates rhetorical theory and practice in contexts of cutting-edge literary, cultural, and interdisciplinary criticism, public discourse, and public intellectual debate. Individual sections explore one or more of the following subgenres: rhetorical criticism, hybrid personal-critical essays, case studies, legal argument and advocacy, documentary, satire, commentaries, and review essays. Writing sample required. Prerequisite: ENGL 0130, 0160, or 0180. Class list will be reduced to 12 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrators. S/NC.

1140A The Literary Scholar
For the advanced writer. This course centers its literary inquiries on cognitive poetics. From this critical perspective, we will examine the histories of literary criticism (Wimsatt, Brooks, et alii), literary theory (Saussure, Foucault, Derrida, et alii), and English literature (from Beowulf to Philip Larkin); we will look at reader response theory, stylistics, literary linguistics, rhetorical theory, and philology. Writing will emerge from critical reading but will not be constrained by it and hence will range from reforming conventional literary discourse to experimenting with nontraditional forms. Prerequisite: ENGL 0130, 0160, or 0180. Class list will be reduced to 12 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 ENGL1140A S01 21020 MWF 1:00-1:50(06) (L. Stanley)

1140B The Public Intellectual
This course offers advanced writers an opportunity to practice sophisticated, engaged critical writing in academic, personal, and civic modes. Emphasis will be on writing "public" essays (general audience essays that do intellectual work or academic essays that address public topics), ideally in fluid, "hybrid," audience-appropriate forms. Areas of investigation will include (but are not limited to) the review essay, the cultural analysis essay, literary documentary, and the extended persuasive/analytic essay. It will include some brief "touchstone" investigations into rhetorical theory, with the aim of helping to broaden our concepts of audience, analyze the constitutive and imaginative effects of language, increase the real-world effectiveness of our own language practices, and situate our writing within current political, cultural, aesthetic and intellectual debates. Students must have sophomore standing or higher in order to be admitted to the class. A writing sample will be administered on the first day of class. Prerequisite: ENGL 0130, 0160, or 0180. Class list will be reduced to 12 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 ENGL1140B S01 21021 W 3:30-5:20(14) (C. Imbrigo)

1160 Special Topics in Journalism
Class list will be reduced after writing samples are reviewed during the first week of classes. Preference will be given to English concentrators. Enrollment limited to 17.

1160A Advanced Feature Writing
For the advanced writer. Nothing provides people with more pleasure than a "good read." This journalism seminar helps students develop the skills to spin feature stories that newspaper and magazine readers will stay with from beginning to end, both for print and on-line publications. Students will spend substantial time off-campus conducting in-depth interviews and sharpening their investigative reporting skills. The art of narrative storytelling will be emphasized. Prerequisite: ENGL0160 or published clips submitted before the first week of classes. Class list will be reduced to 17 after writing samples are reviewed. Preference will be given to English concentrators. Banner registrations after classes begin require instructor approval. S/NC.

Spr ENGL1160A S01 21022 T 4:00-6:20(16) (T. Breton)

1160D The Common Critic
For the advanced writer. Aimed at the cultivated consumer of books, magazines and newspapers— what has traditionally been called the common reader. Students will attend films, plays, art shows, concerts or dance performances and write weekly reviews based on these experiences. Readings include Orwell, Woolf, Shaw, Kael, Tynan, Clive James, Ziobnow Herbert, and current reviews. Writing sample submitted at first class; also a previous sample, if possible, submitted at the same time. Class list will be reduced to 12 after writing samples are reviewed during the first week of classes. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL1160D S01 11421 Th 4:00-6:20(13) (R. Eder)

1180 Special Topics in Creative Nonfiction
Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 1140, 1160, 1180, or 1190. 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.

1180E Lifewriting
Features theoretical and practical study of lifewriting's various forms--memoir, diary, essay, and autobiography--and the crafting of personal narrative. Students read books, view films, and keep an electronic diary and paper notebook. Requirements include a personal critical essay and autobiography. Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 1140, 1160, 1180, or 1190. 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.

Spr ENGL1180E S01 26496 T 4:00-6:20(16)

1180G Lyricism and Lucidity
For the advanced writer. This course will explore two subsets of the personal essay that blur or cross boundary lines--the lyric essay and the photographic essay--in both traditional and experimental formats. Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, or any

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public.P_Main).
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 ENGL1180G S01 21023 TTh 10:30-11:50(09) (C. Imbriglio)

1180J Tales of the Real World
For the advanced writer, this section offers a chance to practice the pleasures and challenges of nonfiction analysis and story-telling in the forms of literary journalism, historical narrative, and personal essay or memoir. Inspirations will include Truman Capote, Sebastian Junger, Jamaica Kincaid, and Maxine Hong Kingston. Intensive practice in researching, interviewing, redrafting, and editing. Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 1140, 1160, 1180, or 1190. 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 ENGL1180J S01 16764 F 3:00-5:20(15) (E. Taylor)

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: ENGL 0130, 0160, 0180, 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 ENGL1180K S01 11422 MWF 10:00-10:50(03) (C. Imbriglio)

1180P Further Adventures in Creative Nonfiction
For the advanced writer. A workshop course for students who have taken ENGL 0180 or the equivalent and are looking for further explorations of voice and form. Work can include personal essays, literary journalism and travel writing. Readings from Ian Frazier, Joan Didion, David Sedaris, John McPhee and others. Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 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 14600 TTh 1:00-2:20(10)

1180Q Narrating History
For the advanced writer: the protocols of historical narrative and essay for a general audience. Using the archives of Brown, the Rhode Island Historical Society, and the student's family (if feasible), each writer will research primary and secondary sources, use interviews and oral histories, to help shape three engaging, instructive true stories of the past. Intensive literary work, revisions, and peer editing. Writing sample required. Prerequisite: EL 13, 16, 18, 114, 116, 118, or 119 (ENGL0130, 0160, 0180, 1140, 1160, 1180, or 1190). 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 ENGL1180Q S01 26497 F 3:00-5:20(15) (E. Taylor)

1180R Travel Writing: Personal and Cultural Narratives
For the advanced writer. Helps students build skills in the growing genre of travel writing, including techniques for reading, observing, interviewing, composing, and revising travel pieces. Students will read the best contemporary writing about national and international travel in order to develop their own writing in areas like narrative, setting, characters, and voice. The course will feature interactive discussions, instructor conferences, and workshops. Prerequisite: ENGL 0130, 0160, 0180, 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 ENGL1180R S01 15435 MWF 12:00-12:50(12)

1190 Special Topics in Nonfiction Writing
Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 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.

1190A "The Arrangement of Words": Liberating Fiction(s)
For the advanced writer. The fiction writer's perception of writing is often excluded from or seen as marginal to academic studies. Concentrating on American fiction writers 1918-1945 (Hemingway, Faulkner, Welty, O'Connor, others), we examine their nonfictional and fictional prose on writing fiction. Journals, weekly response papers, three formal essays; does not include writing fiction. Writing sample required. Prerequisite: ENGL 0130, 0160, 0180, 1140, 1160, 1180, or 1190. 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.

Spr ENGL1190A S01 26498 MWF 9:00-9:50(02) (L. Stanley)

1190L Creative Nonfiction: Practice and Criticism
For advanced writers. What is Creative Nonfiction? Writers have flocked to it: scholars have questioned it. Does it harm the truth? Is it narrative with too much "I" and too little "Eye"? What makes it significant? To help us explore persistent questions about form, point of view, method, and ethics, readings will include historical examples, recent practitioners, editors, and critics. Intensive reading responses, research, drafting, and revision. Two critical essays; one piece of creative nonfiction. Prerequisite: ENGL0130, 0160, 0180, 1140, 1160, 1180, or 1190. 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 ENGL1190L S01 26499 TTh 1:00-2:20(10) (E. Taylor)

1190M The Teaching and Practice of Writing: Writing Fellows Program
For students accepted as Writing Fellows, this course offers the study of literary essays and composition theory to help develop their own writing with a critical awareness of the elements of an essay. Students will write essays throughout the semester and will confer with each other for every paper, thereby gaining experience in peer tutoring and becoming better writers through the help of an informed peer. They will also respond to the writing of a cohort of students in another designated Writing Fellows class. 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. Instructor's permission required. Enrollment Limited to 18.

Fall ENGL1190M S01 15436 TTh 10:30-11:50(09) (D. Brown)
Fall ENGL1190M S02 15437 TTh 1:00-2:20(10) (D. Brown)

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. Fall; Spr

1210 History of the English Language
Provides an introduction to the study of the English language from a historical, linguistic, and philological perspective, and an overview of the study of the "Englishes" that populate our globe. While providing
students with the ability to identify and explain language change through historical periods, also examines language as a social and political phenomenon.

Fall ENGL1210 S01 14853 MWF 10:00-10:50(03)

1310 Special Topics in Medieval and Early Modern Literatures and Cultures

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? Authors may include Columbus, de Vaca, Shakespeare, Bradstreet, and Native American tales.

Spr ENGL1310H S01 26501 MWF 9:00-9:50(02) (J. Egan)

1310J Imagining the Individual in Renaissance England

Spr ENGL1310J S01 26502 MWF 11:00-11:50(04) (S. Foley)

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 16765 TTh 1:00-2:20(10) (E. Bryan)

1311C Milton
A close examination of the poetry and prose of John Milton, from the early lyrics to the polemical prose writings of the 1640s and 50s, to the masterpieces Paradise Lost, Paradise Regained, and Samson Agonistes. Not open to first-year students.

Fall ENGL1311C S01 16825 MWF 11:00-11:50(04) (M. Redfield)

1360 Seminars in Medieval and Early Modern Literatures and Cultures
Enrollment limited to 20.

1360H Seminar in Old English Literature
This course will offer a thorough introduction to the earliest period of English language and literature, and allow students, by the end of the course, to read and appreciate a language that is both intrinsically foreign and importantly familiar. We will start with an extensive coverage of grammar and syntax, before reading short texts, and Old English poetry, including excerpts from Beowulf. Enrollment limited to 20. Not open to first-year students.

Spr ENGL1360H S01 24600 MWF 1:00-1:50(06)

1360K Shakespeare and Company
Shakespeare belonged to a community of actors and playwrights who competed for audiences in a fledgling entertainment industry. How do his plays compare to those of Marlowe or Jonson, Middleton or Webster? Reading Shakespeare in tandem with his contemporaries, we will consider the genres, sources, styles and conventions they shared, the issues that concerned them, and their differing artistic perspectives. Prerequisite: ENGL0400A or equivalent. Enrollment limited to 20 juniors and seniors.

Fall ENGL1360K S01 16766 TTh 9:00-10:20(08) (C. Kahn)

1360P Shakespearean Tragedy
We will read in depth early, middle and late tragedies by Shakespeare, attending to the genre as understood in the Renaissance and as Shakespeare developed it, along with critical readings that explore tragic form. Oral presentations, short papers, and a final research paper. Prerequisite: ENGL 0400A or equivalent. Enrollment limited to 20 juniors and seniors. WRIT

Fall ENGL1360P S01 16767 TTh 2:30-3:50(11) (C. Kahn)

1360U Europe in the Vernacular
Why did a few early medieval European authors write not in Latin or Arabic but in vernacular languages like Castilian, Early Middle English, Old Icelandic, or Old French? We will read primary texts by Laamon, Alfonso X, Dante, troubadours and anonymous others, and assess previous claims about the "rise of the individual" and various proto-nationalisms as we rewrite the story of how, why, and for whom multilingual vernacular writings came to be. Readings in modern English supplemented by medieval languages. Enrollment limited to 20 students. Not open to first-year students. Sophomores require instructor permission to register.

Spr ENGL1360U S01 26579 M 3:00-5:20(13) (E. Bryan)

1400 Undergraduate Independent Study in Medieval and Early Modern Literatures and Cultures
Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor permission required.
Fall; Spr

1510 Special Topics in the Enlightenment and the Rise of National Literatures and Cultures

1510A By a Lady: Jane Austen and Her Predecessors
Before turning to an in-depth consideration of Austen's major work, this course takes a revisionary view of the rise of the novel by studying fiction by women writers from Aphra Behn to Mary Wollstonecraft. Readings include Haywood's Love in Excess, Inchbald's A Simple Story, Burney's Evelina, and, of course, Austen's Northanger Abbey, Pride and Prejudice, Emma, Mansfield Park, and Persuasion.

Fall ENGL1510A S01 16768 TTh 1:00-2:20(10) (M. Rabb)

1511E Monsters, Giants, and Fantastic Landscapes
Monsters, giants, and exotic landscapes fill the pages of much writing in English before 1900. We will examine the ways in which a number of writers before 1900 use the strange and the fabulous to suggest new ways of understanding what it means to be normal. Authors may include Columbus, Shakespeare, Mary Shelley, and Poe.

Fall ENGL1511E S01 16769 MWF 2:00-2:50(07) (J. Egan)

1511L On Being Bored
This course explores texts/films that represent and formally express states of non-productivity or non-desire. Beginning with the Enlightenment and romantic periods, we will reflect on narratives with neither progress nor plot, characters that resist characterization, and poems that deny assertion and revelation. Authors include: Kleist, Kant, Rousseau, Coleridge, de Quincey, Keats, Blanchot, Levinas, Beckett, Ashbery, Schuyler.

Spr ENGL1511L S01 26580 TTh 10:30-11:50(09) (J. Khalip)

1511M Victorian Self and Society
This multi-genre course studies literature and culture of the Victorian period, looking at the changing ideas of society and the individual's place within that larger community in an age of empire, industrialization, urbanization, class conflict, and religious crisis. Topics include conceptions of the role of art and culture in society, the railway mania of the 1840s, women's suffrage and the condition of women, and the Great Exhibition of 1851. Readings (essays, poems, stories, plays, and novels) by Carlyle, Charlotte Brontë, Ruskin, Robert
Browning, Dickens, Tennyson, Christina Rossetti, George Eliot, and Lewis Carroll.

Spr ENGL1511M S01 26581 TTh 10:30-11:50(09) (V. Ryan)

1560 Seminars in the Enlightenment and the Rise of National Literatures and Cultures
Enrollment limited to 20.

1560V The Lives of a Text
Books are composed not merely of concepts, for they are material objects whose forms, functions, and value can vary widely. We will make extensive use of rare editions at the John Hay Library to help us explore not only the literary content of works but also their production and dissemination in various formats and for various audiences. Authors include Shakespeare, Irving, Poe. Enrollment limited to 15. LILE

Spr ENGL1560V S01 26507 MWF 2:00-2:50(07) (J. Egan)

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 16770 M 3:00-5:20(13) (W. Keach)

1561E The Western
An examination of the formula Western in American fiction, art, and cinema, with a view toward situating the genre within urban middle-class culture in the late 19th- and 20th-century United States. Authors to be considered include Twain, Harte, Crane, Austin, Cather, Doctorow, Reed, Leonard, and L'Amour. Films: Destry Rides Again, Stagecoach, Rio Bravo, The Seven Samurai, Fistful of Dollars, Dirty Harry, The Man from Laramie, Paint your Wagon, Act of Violence, among others. Enrollment limited to 20.

Spr ENGL1561E S01 26508 M 3:00-5:20(13) (D. Nabers)

1561H The Brain and the Book: Thinking and Reading in the Victorian Novel
Considers mostly nineteenth-century novels in light of theories of cognition, both nineteenth-century and contemporary. This course proposes to study how some of the foundational questions of literary study—the nature of language, the location of meaning, the experience of reading, the power of metaphor, and the sources of creative thought—can also be studied from the perspective of mental science. Authors may include Charles Dickens, Wilkie Collins, George Eliot, Henry James. Limited to juniors and seniors only. Others by permission of the instructor if space allows. Banner registrations after classes begin require instructor approval. Enrollment limited to 20. LILE

Fall ENGL1561H S01 16771 M 3:00-5:20(13) (V. Ryan)

1561J The Poetics of Confession
This course explores the theoretical structures and models of confession in various literary and cinematic sources, with a special emphasis on work from the nineteenth and twentieth centuries.

Spr ENGL1561J S01 26582 Th 4:00-6:20(16) (J. Khalip)

1561K Restoration and Eighteenth-Century Drama
After almost two decades of closure, public theaters re-opened in 1660. This new beginning occasioned new plays, new kinds of performance and production, and new intersections between the stage and society. We will study works by Etherege, Wycherly, Congreve, Dryden, Behn, Gay, Lillo, Sheridan, and others. Not open to first-year students.

Spr ENGL1561K S01 26583 Th 4:00-6:20(16) (M. Rabb)

1561L Revolution, War, Poetry: Wordsworth in the 1790s
William Wordsworth's poetic experiments during the 1790s are often said to have invented modern poetry as the poetry of consciousness; they are also efforts to find language adequate to a time of revolution, war, and modernity. This seminar examines texts by various writers of the revolutionary era, but focuses on Wordsworth's poetry from the early 1790s to the 1805 Prelude. Open to 20 juniors and seniors concentrating in English, Comparative Literature, or MCM. Graduate students and others require instructor permission. Prerequisite: ENGL 0410 or equivalent.

Spr ENGL1561L S01 26584 W 3:00-5:20(14) (M. Redfield)

1561M American Literature and the Corporation
A study of the development of the American novel from the Civil War to the present in light of the emergence of the corporation as the principal unit of economic enterprise in the United States. We will survey corporate theory from Lippmann to Collins, and use it to frame the novel's development from realism through modernism into postmodernism. Corporate theorists to be considered: Lippmann, Dewey, Berle, Drucker, Mayo, Demming, Friedman, Coase. Novelistst to be considered: Twain, Dreiser, Wharton, Stein, Faulkner, Steinbeck, Wright, Ellison, McCullers, Reed, Gaddis, Morrison. Enrollment limited to 20.

Fall ENGL1561M S01 16826 TTh 2:30-3:50(11) (D. Nabers)

1600 Independent Study in the Enlightenment and the Rise of National Literatures and Cultures
Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor's permission required.
Fall; Spr

1710 Special Topics in Modern and Contemporary Literatures and Cultures

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. DVPS

Spr ENGL1710I S01 25173 Th 9:00-10:20(08) (R. Murray)

1710K Plain Folk: 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 16774 TTh 10:30-11:50(09) (R. Murray)

An advanced survey that examines how 20th-century American novels construct the nation as "imagined community" and as "fictive ethnicity." We focus on the central role that conceptions of race—as well as those of gender and sexuality—play in the novelistic visions of America. Authors may include Hughes, Hurston, Larsen, Fisher, Locke, and McKay. DVPS

Spr ENGL1710M S01 26511 MWF 10:00-10:50(03) (D. Kim)

1710P The Literature and Culture of Black Power Reconsidered
This course reexamines the Black Power movement as a signal development in American literature and culture. We will read classics from the period with a view toward reassessing the nuances and
1701Y American Literature and the Cold War
A study of American literature in the context of the broad intellectual culture--strategic, ideological, philosophical, aesthetic, and economic--engendered by the conflict between the United States and the Soviet Union from 1945 to 1991. We will assess the role of the bomb, McCarthyism, game theory, the military industrial complex, and strategic doctrines of containment and deterrence in the rise of postmodernism in American literature. Authors to be considered include Bellow, Highsmith, Miller, Elming, McCarthy, Mailer, Pynchon, Wideman, Coover, Delillo. Students should register for ENGL 1710Y S01 and may be assigned to conference sections by the instructor during the first week of class.

Spr ENGL1710Y S01 26585 MWF 11:00-11:50(04) (D. Nabers)

1760 Seminars in Modern and Contemporary Literatures and Cultures
Enrollment limited to 20.

1760E Who's Afraid of Virginia Woolf?
We will read novels, essays, diaries, and letters by Woolf in order to ask how and why Virginia Woolf haunts our culture and to consider her status as a cultural icon. The seminar will explore her work in the contexts of history, modernism, and literary influences, and it will examine the dimensions of Woolf's afterlife--a posthumous dynamic that shapes issues in art, politics, and gender. Enrollment limited to 20 seniors and juniors. LILE

Fall ENGL1760E S01 15421 TTh 1:00-2:20(10) (R. Reichman)

1760K Reading New York
We will explore narratives of New York City, both fictional and nonfictional, from the early 20th century to the present. Topics to be addressed include immigration, segregation and mobility, cosmopolitanism and the neighborhood, celebrity and postmodernism. Authors may include John Dos Passos, Ann Petry, E.B. White, Jane Jacobs, Rem Koolhaas. Registration limited to English and Urban Studies concentrators. Students from other concentrations should attend class on the first day and will be admitted if space is available. Enrollment limited to 20. Not open to first-year students. Prerequisite: two previous literature classes.

Spr ENGL1760K S01 26513 TTh 2:30-3:50(11) (E. Katz)

1760L Bloomsbury and Modernism
This course will explore the contribution of the so-called "Bloomsbury Group" to the development of modernism in Britain. The focus will be on the central literary figures (Virginia Woolf, E. M. Forster, T. S. Eliot), but attention will also be paid to the visual arts (especially Roger Fry and Post-Impressionism) and social criticism (Lynton Strachey, Leonard Woolf, and John Maynard Keynes). A major question will be how the controversies swirling around Bloomsbury exemplify important debates about modernism. Enrollment limited. Not open to first-year students. Banner registrations after classes begin require instructor approval.

Spr ENGL1760L S01 26514 TTh 9:00-10:20(08) (P. Armstrong)

1760Q James Joyce and the Modern Novel
How did James Joyce's narrative experiments change the novel as a genre? In addition to studying Joyce's major works (Dubliners, Portrait of the Artist, and Ulysses), we will read novels by important contemporaries and successors such as Virginia Woolf, William Faulkner, Samuel Beckett, Salman Rushdie, Vladimir Nabokov, and Thomas Pynchon. Readings will include representative and influential samples of the Joyce criticism and well as theoretical statements about modernism and post-modernism. Banner registrations after classes begin require instructor approval. Enrollment limited to 20.

Fall ENGL1760Q S01 16776 F 3:00-5:20(15) (P. Armstrong)

1760T Literary Africa
Explores the sense in which the word "Africa" has come to carry a range of disparate moral, epistemological, and political connotations in literary and related discourses. We will study 19th century autobiographical and travel writing by black African agents of Christian missionary organizations (Ajayi Crowther, Birch Freeman, Philip Quaque, Joseph Wright); critical essays by contemporary scholars of postcolonial cultures (Appiah, Bhabha, Mudimbe, Peel, Pratt); and imaginative literature by African writers (Achebe, Soyinka, Ngugi, Marechera, Vera). Enrollment limited to 20. Not open to first-year students. DVPS

Spr ENGL1760T S01 23975 TTh 1:00-2:20(10) (O. George)

1761P Yeats, Pound, Eliot
Readings in the poetry and selected prose of Yeats, Pound, and Eliot. Enrollment limited to 20. LILE

Spr ENGL1761P S01 23514 F 3:00-5:20(15) (M. Blasing)

1761Q W. G. Sebald and Some Interlocutors
The works of W. G. Sebald have received a huge amount of critical attention since his death in 2001, particularly from critics interested in the question of the ethics of literature after Auschwitz. But what is Sebald's literary heritage, and who are his interlocutors? Besides Sebald's works, readings will include Conrad, Bernhard, Kafka, Nabokov, Stendhal, Chatwin, Walser, Adorno, Herzog, Lanzmann. Banner registrations after classes begin require instructor approval. Enrollment limited to 20. Not open to first-year or graduate students.

Spr ENGL1761Q S01 26515 TTh 2:30-3:50(11) (T. Bewes)

1761V The Korean War in Color
We examine how the Korean War was depicted in U.S. popular culture as it was taking place with a particular focus on how it catalyzed a wholesale transformation of both domestic and transnational narratives of race. In addition to looking at Hollywood film, newspaper and magazine coverage from the 1950, we also analyze how this event has been imagined by Asian American authors many years later. We will read the fiction of Susan Choi, Ha Jin, Richard Kim, and Chang-Rae Lee. Enrollment limited to 20.

Fall ENGL1761V S01 16827 W 3:00-5:20(14) (D. Kim)

1800 Undergraduate Independent Study in Modern and Contemporary Literatures and Cultures
Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor's permission required.
Fall; Spr

1900 Special Topics and Seminars in Critical and Cultural Theory

1900D Literature and Politics
Literature as a changing historical formation that often represents and is always shaped by the practices of organizing, asserting, and controlling power in society. Sustained focus on writings by Raymond Williams, Leon Trotsky, Michel Foucault, Edward Said, Gayatri Spivak, and Terry Eagleton, and on literary texts read from the perspectives of these six theorists (possibly Shakespeare, Milton, Marvell, Swift, Dickens, Gaskell, the Brontës, Victor Serge, Anna Akhmatova). WRIT

Spr ENGL1900D S01 26519 TTh 2:30-3:50(11) (W. Keach)

1900F Interpretation
This course will introduce students to some of the most important issues in the theory of interpretation and explore their implications for critical practice. Topics will include the circularity of interpretation, the
availability and reliability of tests for validity, the causes and consequences of interpretive conflict, and the historicity of understanding. Readings will include major theoretical statements on these issues as well as exemplary critical texts.

Spr ENGL1900F S01 26520 TTh 1:00-2:20(10) (P. Armstrong)

1900F Critical Methodologies: Contemporary Literary Theory
A survey of theories of literature from the early 20th century to the present, with particular attention to relations between "literary theory" and the broader phenomena of cultural studies and Critical Theory writ large. We will examine the New Critics; structuralism, poststructuralism and new historicism; cultural theory, including psychoanalysis, marxism, and aesthetic theory. Topics will include literariness and textuality, the reader and subjectivity, narrative and mimesis, and the reemergence of form in contemporary literary studies. Enrollment limited to 20. Not open to first-year or graduate students.

Fall ENGL1900I S01 16778 Th 4:00-5:20(13) (E. Rooney)

1900I  Special Topics in Literatures and Cultures in English
This class focuses both on literature influenced by and theoretical considerations of photography. Texts and films to include Barthes' Camera Lucida, essays by Benjamin, Kracauer, and Krauss, Cortazar's "Blow-Up," Antonioni's Blow-Up, Fitzgerald's Tender is the Night, Sebald's The Emigrants, West's The Day of the Locust, Frampton's Nostalgia, Egoyan's Calendar, Rancière's The Future of the Image, and poetry by Rich, Ashbery, and Larkin. Not open to first-year students.

Spr ENGL1900V S01 26589 W 3:00-5:20(14) (S. Burrows)

1910 Special Topics in Literatures and Cultures in English

1910A Dreamworlds: Utopia from Plato to the Present
Can acts of writing change the world? This course looks at a number of famous utopias and dystopias from classical time to the modern period and analyzes how the genre's literary experiments transform reading into a political act. Works by Plato, More, Montaigne, Shakespeare, Swift, H.G. Wells, and Le Guin. Films will include Blade Runner and Pleasantville.

Spr ENGL1910A S01 26521 TTh 1:00-2:20(10) (J. Feerick)

1950 Senior Seminar
This rubric includes seminars designed specifically for senior-year English concentrators. They focus on a range of theoretical, thematic, and generic topics that provide advance English undergraduates to explore more profoundly or more synthetically fundamental issues connected to the study of literature in general and literature in English in particular. Although English Honors seniors may register for them, these courses provide a "capstone" experience for all English concentrators during their senior year. Enrollment limited to 20 seniors.

1950A Form and Feeling in Renaissance Poetry
Pending Approval. Renaissance poets laid claim to the ethical power of poetry to move people through imagination. How does formal imitation and innovation create fields of feeling in the poetry of Spenser, Sidney, Shakespeare, Donne, Jonson, and Milton? Enrollment limited to 20 seniors.

Fall ENGL1950A S01 17196 M 3:00-5:20(13) (S. Foley)

1950B Literature and the Ideology of the Aesthetic
Pending Approval. Theoretical and historical exploration of the idea of literature understood as writing that has the status of art—and of the relation of this idea to the emergence and elaboration of discourses of the aesthetic. First six weeks: decisive eighteenth- and nineteenth-century developments in the meaning of literature as it relates to the aesthetic. Second six weeks: recent positions (especially poststructuralist and Marxist) that figure prominently in current debates. Enrollment limited to 20 seniors.

Spr ENGL1950B S01 26963 M 3:00-5:20(13) (W. Keach)

1991 Senior Honors Thesis in Literatures and Cultures in English
Seminar and workshops led by the Advisor of Honors in Literatures. 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 Literatures program have been accepted. Permission should be obtained from the Honors Advisor for Literatures and Cultures in English. S/NC.

Fall ENGL1991 S01 11429 M 3:00-5:20(13) (E. Katz)

1992 Senior Honors Thesis in Literatures and Cultures in English
Independent research and writing under the direction of a faculty member. Permission should be obtained from the Honors Advisor for Literatures and Cultures in English. Open to senior English concentrators pursuing Honors in Literatures and Cultures in English. Instructor permission required.

Spr ENGL1992 S01 21030 'To Be Arranged' (E. Katz)

1993 Senior Honors Seminar in Nonfiction Writing
This course is designed for students accepted into the Nonfiction Honors Program. It will be run in workshop format, and will focus on research skills and generative and developmental writing strategies for students embarking on their thesis projects. Weekly assignments will be directed toward helping students work through various stages in their writing processes. Students will be expected to respond thoughtfully and constructively in peer reviewing one another's work. Open to seniors who have been admitted to the Honors Program in Literature and Cultures in English. Instructor permission required.

Fall ENGL1993 S01 17138 F 3:00-5:20(15) (C. Imbriglio)

1994 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. Instructor's permission required. Reserved for: Seniors. Reserved for certain concentrations; please check Banner for the list. Prereq: ENGL 1993;

Spr ENGL1994 S01 26949 'To Be Arranged' (C. Imbriglio)

(Primarily for Graduates)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
2360P Thinking with Romance in the Renaissance
Modernity defines romance as escapist, a mode that flies from the "real." Yet Renaissance writers placed it at the center of debates about politics, ethics, and knowledge. Tracking its generic fingerprint in Spenser's romance-epic, we will consider its adaptation for the stage as tragicomedy and its relation to epistemological shifts dividing science from fiction, knowledge from pleasure. Authors include Raleigh, Spenser, Shakespeare, Fletcher, Massinger, Bacon, Cavendish. Open to graduate students only.

Spr ENGL2360P S01 26591 W 3:00-5:20(14) (J. Feerick)

2360R Civil Wars, Restoration, and Early Georgian Literature
The seminar will consider major works from the English Civil Wars to the first years of the eighteenth-century, with attention to cultural and theoretical contexts for understanding important developments such as print culture, war, nation-formation, the marketplace, and public/private spheres. Writers will include Milton, Rochester, Behn, Restoration playwrights, Dryden, Swift, and others. Additional readings will include selections from Adomo, Pocock, Anderson, Zizek, Brown, Johns, and others. Enrollment limited to 15 graduate students.

Fall ENGL2360R S01 16828 W 3:00-5:20(14) (M. Rabb)

2400 Graduate Independent Study in Medieval and Early Modern Literatures and Cultures
Section numbers vary by instructor. May be repeated for credit. Instructor's permission required.

Fall; Spr

2560 Graduate Seminars in the Enlightenment and the Rise of National Literatures and Cultures
Enrollment limited to 15.

2560E Liberalism
An interdisciplinary approach to American culture and literary history through the lens of liberal ideologies. Readings include Franklin, Thoreau, sentimental novel, and Ellison’s Invisible Man. Enrollment limited to 15 graduate students. Exceptions with permission by instructor. Instructor’s permission required.

Spr ENGL2560E S01 26524 Th 4:00-6:20(16) (P. Gould)

2561B Things Not Entirely Possessed: Romanticism and History
This course explores how Romanticism thinks through the historical, and in particular, it engages Romantic mediations of historical knowledge through aesthetic form. What is the relationship of the aesthetic to the historical? How is subjectivity an effect of a poem’s negotiation of the past? And what role does the "future" play in Romanticism? Enrollment limited to 15 graduate students.

Fall ENGL2561B S01 16829 Th 4:00-6:20(13) (J. Khalip)

2561C Intellectuals and the Public Sphere
Considers the relationship of the artist to the public sphere, focusing on the late-nineteenth-century. We will look back from debates today over the "public intellectual" to Victorian debates over the "intellectual." Attention to how narratives of intellectual decline in the late nineteenth and twentieth centuries portray the figure of the artist: as prophet, intellectual, professional, critic, genius, woman, madman, aesthete, scientist, and social celebrity. Readings will include literary writers and essayists (such as Dickens, Trollope, James, Pater, Shaw, Wilde, Wells), alongside theorists (Humboldt, Weber, Brecht, Benjamin, Habermas, Bourdieu, Latour, Kittler). Enrollment limited to 15 graduate students.

Spr ENGL2561C S01 26592 F 3:00-5:20(15) (V. Ryan)

2600 Graduate Independent Study in the Enlightenment and the Rise of National Literatures and Cultures
Section numbers vary by instructor. May be repeated for credit. Instructor's permission required.

Fall; Spr

2760 Graduate Seminars in Modern and Contemporary Literatures and Cultures
Enrollment limited to 15.

2760A American Modernist Poetry and Poetics
Study of the poetry and prose of Eliot, Pound, Stevens, Williams, H.D., Moore, and Hughes, with additional readings in criticism and theories of modernism. Enrollment limited to 15 graduate students.

Spr ENGL2760A S01 26899 T 12:00-2:20(10) (M. Blasing)

2760M Postcoloniality, Globalism, Diaspora
Introduces students to the intellectual current that has come to be called "postcolonial theory" in contemporary criticism. We read influential theoretical writings alongside literary texts by writers and critics associated with concepts of postcoloniality, transnationalism, or diaspora. We thus combine theoretical with literary texts in order to explore intersections or disjunctions between idioms, genres, and philosophical investments on such inter-related concepts and problematics as: nationalism, biopower, globalization, diaspora, or the claims of literature on the arena of the present. Texts by: Coetzee, Fanon, Gordiner, Naipaul, Said, Spivak, and Walcott. Enrollment limited to 15 graduate students.

Fall ENGL2760M S01 16784 W 3:00-5:20(14) (O. George)

2760Y American Orientalism and Asian American Literary Studies
We examine critical studies of American Orientalism, influential works of Asian Americanist cultural criticism, American Orientalist texts by white and black authors, and literary texts by Asian American authors. Critics, cultural historians and writers we read may include: Christina Klein, Vijay Prashad, Elaine Kim, Frank Chin, Lisa Lowe, W.E.B. DuBois, Susan Choi, Nam Le, Karen Tei Yamashita. Enrollment limited to 15 graduate students.

Spr ENGL2760Y S01 26593 M 3:00-5:20(13) (D. Kim)

2760Z African American Literature After 1965: Nationalism and Dissent
Since the late 1960s, major theoretical and literary currents in African American letters have been profoundly influenced by black nationalism. This seminar examines the persistence of nationalist thought in ongoing debates about racial authenticity, gender inequality, black aesthetics, and diasporic politics. In so doing we will attend to both the complexity of nationalist ideology and the dissent generated by it. Authors include Baraka, Cruse, Giovanni, Morrison, Senna, Whitehead, and Gilroy. Open to graduate students only.

Spr ENGL2760Z S01 26594 F 3:00-5:20(15) (R. Murray)

2800 Graduate Independent Study in Modern and Contemporary Literatures and Cultures
Section numbers vary by instructor. May be repeated for credit. Instructor's permission required.

Fall; Spr

2900 Advanced Topics in Critical and Cultural Theory
Enrollment limited to 15.

2900M The Reading Effect and the Persistence of Form
This course examines the "reading effect" as it emerges in work on the question of form and contemporaneous scholarship on the problematics of reading. We will trace the ways in which these related but distinct critical idioms negotiate concepts of mutual concern (interpretation, representation, the reading subject/reading brain). Topics include "new formalism," cognitive studies, symptomatic
reading. Theorists from Althusser and deMan to Marcus, Wolfson and Zunshine. Enrollment limited to 20 graduate students; undergraduate seniors may enroll with instructor permission.

Spr ENGL2900M S01 26595 Th 4:00-6:20(16) (E. Rooney)

2900N Ethical Turns
Examines the relationship between literature and ethics through the notions of responsibility, conviction, obligation, knowledge, ignorance, and complicity. Readings by Barthes, Benjamin, Arendt, Freud, Lacan, Winnicott, Derrida, de Man, Miller, Butler. Enrollment limited to 20 graduate students.

Fall ENGL2900N S01 16830 Th 4:00-6:20(13) (R. Reichman)

2950 Seminar in Pedagogy and Composition Theory
An experimental and exploratory investigation into writing as a preparation for teaching college-level writing. Reviews the history of writing about writing, from Plato to current discussions on composition theory. Against this background, examines various processes of reading and writing. Emphasizes the practice of writing, including syllabus design. Priority given to students in the English Ph.D. program. Undergraduates admitted only with permission of instructor.

Fall ENGL2950 S01 11435 T 4:00-6:20(13) (L. Stanley)

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

Fall ENGL2970 S01 11436 'To Be Arranged'
Spr ENGL2970 S01 21037 'To Be Arranged'

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

Fall ENGL2990 S01 11437 'To Be Arranged'
Spr ENGL2990 S01 21038 'To Be Arranged'

Environmental Studies
(Primarily for Undergraduates)

0070 First-Year Seminar
Enrollment limited to 20 first year students.

0070C Transcending Transportation Impacts
Students will be engaged in interdisciplinary analyses of the life-cycle costs, environmental impacts, technical developments, and policy innovations at the local and regional level. We will discuss technical modifications in vehicles, such as plug-in hybrids, as well as policy and planning on intermodal systems, recycle-a-bike programs, intelligent transportation systems, and other innovations. Enrollment limited to 20 first year students. FY S LILE

Fall ENVS0070C S01 16352 T 4:00-6:20(13) (K. Teichert)

Offers a survey introduction to contemporary environmental issues and is a “gateway” class for those interested in concentrations in environmental studies/sciences. It is a required course for concentrators. We explore the relationships between human societies and the non-human environment through a survey of topical cases, including: human population growth and consumption, global climate change, toxins, waste streams, water resources, environmental justice and ethics, and agro-food systems. This course also analyzes various solutions—social, political, technical, and economic—put forth by institutions and individuals to address questions of environmental sustainability. One 90-minute weekly discussion group required. Students MUST register for a conference, and a lecture section.

Fall ENVS0110 S01 16037 MWF 10:00-10:50(03) (K. DeMaster)

0240 Earth: Evolution of a Habitable Planet (GEOL 0240)
Interested students must register for GEOL 0240 S01 (CRN 21696).

0260 Religion Gone Wild: Spirituality and the Environment (RELS 0260)
Interested students must register for RELS 0260 S01 (CRN 26407).

0410 Environmental Stewardship
Challenges students to address the economics and logistics of implementing strategies to conserve resources and reduce the negative impacts of the built environment. The goal is to learn the rationale, process and technical aspects of the practice of environmental stewardship. Topics include sustainable design, institutional change, and corporate environmental responsibility. Students collaborate in interdisciplinary teams on applied projects. Permission by instructor by application process prior to enrollment in the class.

Spr ENVS0410 S01 21246 MW 1:00-2:20(06) (K. Teichert)

0455 Coastal Ecology and Conservation
Enables students to master fundamental ecological concepts and to understand how this knowledge can be used to inform conservation and management. Case studies and field trips will enable students to develop scientific skills and experience the challenges of coastal conservation science. Suitable for students with at least some biology background; the course is aimed at first and second year undergraduates. Expected background: BIOL 0200 or equivalent. Enrollment limited to 15; instructor permission required. Email instructor (Heather_Leslie@brown.edu) to receive course application (due May 1). Admitted students will be able to register for the course in September. WRIT

Fall ENVS0455 S01 14255 TTh 10:30-11:50(09) (H. Leslie)

0490 Environmental Science in a Changing World
Introduces students to environmental science and the challenges we face in studying human impacts on an ever-changing earth system. We will explore what is known, and not known, about how ecosystems respond to perturbations. This understanding is crucial because natural systems provide vital services (water and air filtration, climate stabilization, food supply, erosion and flood control) that can not be easily or inexpensively replicated. Special emphasis will be placed on climate, food and water supply, population growth, and energy. We will use these topics as springboards to explore the utility of the scientific method, the role science can play in policy decisions, and the environmental challenges that face industrial society over the coming century. WRIT

Fall ENVS0490 S01 15718 TTh 1:00-2:20(10) (S. Porder)

0510 International Environmental Law and Policy
Introduces students to principles of international environmental law and examines how international organizations, national governments and non-state actors interact to address human impacts on the global environment. Considers effects of treaties, trade agreements and foreign aid on resolution of trans-boundary environmental problems including climate change, marine governance, biodiversity loss and trade in endangered species and hazardous waste. Students negotiate a mock treaty (NEWORLD) to mitigate some aspect of human impact on global change from the perspective of different state and non-state actors. Introductory coursework that addresses some aspects of environmental studies or environmental science is recommended.

Fall ENVS0510 S01 14636 MWF 1:00-1:50(06) (C. Karp)

0520 Wild Literature in the Urban Landscape
Combines deep study of ecological poetry, fiction, essays and other writing with service to schools in the community through exploration of
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local ecological challenges through both creative and more discursive expressions. The field-work or community component to this course will involve students in conducting workshops that combine literature and ecology in order to better elucidate and understand local issues related to, for one example, eco-industrial histories associated with Gorham Silver in Providence and the current state of Maspspaug Pond on the Reservoir Triangle, where a public high school, Alvarez, now sits on contaminated soil. Enrollment limited to 22 undergraduates. S/NC.

Spr ENVS0520 S01 26330 F 3:00-5:20(15) (R. Benjamin)

(For Undergraduates and Graduates)

1000 Fieldwork in the Urban Community (URBN 1000)
Interested students must register for URBN 1000 S01 (CRN 20668).

1070 The Burden of Disease in Developing Countries (PHP 1070)
Interested students must register for PHP 1070 S01 (CRN 12646).

1110 Estuarine Oceanography (GEOL 1110)
Interested students must register for GEOL 1110 S01 (CRN 14282).

1330 Global Environmental Remote Sensing (GEOL 1330)
Interested students must register for GEOL 1330 S01 (CRN 24195).

1350 Environmental Economics and Policy
Economic analysis of environmental issues in industrialized countries with an emphasis on the implications for designing appropriate policy measures. Topics include: the valuation of environmental goods; the basic theory of economic markets, market failure, and the sources of any failure; private and government solutions to market failure; the role of uncertainty in policy-making; and open trade environments and trans-boundary pollution, on a national and global scale. Applications to issues such as climate change, land use, air and water pollution, and alternative energy. Prerequisite: ECON 1110 or 1130.

Fall ENVS1350 S01 11644 MWF 11:00-11:50(04) (S. Nagavaranu)

1355 Environmental Issues in Development Economics
Examines environmental issues in developing countries, including air and water pollution, land use change, energy use, and the extraction of natural resources. Builds on ENVS 1350 by: delving more deeply into microeconomics; linking household/firm decision-making on environmental issues to choices in labor, land, and product markets; developing basic empirical techniques through exercises and a project; and using recent research to illustrate the roles of econometrics and economic theory in confronting problems at the nexus of the environment, poverty, and economic development. Suggested background: ECON 1630, and ENVS 1350 or ECON 1480.

Spr ENVS1355 S01 24497 TTh 10:30-11:50(09) (S. Nagavaranu)

1370 Environmental Geochemistry (GEOL 1370)
Interested students must register for GEOL 1370 S01 (CRN 12498).

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. Prerequisites: ENVS 0410, or equivalent by permission of instructor. LILE

Fall ENVS1400 S01 13329 W 3:00-5:20(14) (K. Teichert)

1410 Environmental Law and Policy
Introduces students to environmental law in the United States. Uses legal decisions and policy frameworks to consider the roles of non-governamental actors in formation and implementation of environmental policy. Students will become familiar with major federal environmental laws and regulatory databases and see how legal precedent, differing understandings of risk and alternative regulatory and market-enlisting strategies have shaped solutions to environmental problems. Provides opportunity to apply legal skills to local environmental legislation or legal problem. Intermediate coursework in Environmental Studies, Political Science, Community Health, Urban Studies or other environmentally-related coursework is recommended.

Spr ENVS1410 S01 21258 TTh 2:30-3:50(11) (C. Karp)

1440 Conservation Biology (BIOL 1470)
Interested students must register for BIOL 1470 S01 (CRN 13634).

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 11757 ‘To Be Arranged’

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 14251 ‘To Be Arranged’

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 14252 ‘To Be Arranged’

1493 SES-Environmental Science Elective
Two environmental science electives are offered each fall semester as part of the Semester in Environmental Science at the Marine Biological Laboratory, including: aquatic chemistry, mathematical modeling of ecological systems and microbial ecology. Enrollment is limited to students in this program. Instructor permission required.

Fall ENVS1493 S01 14254 ‘To Be Arranged’

1530 From Locke to Deep Ecology: Property Rights and Environmental Policy
Examines the evolution of property law and tenure in land, water, the atmosphere and natural resources, and the consequences of these property rights regimes for environmental protection. Readings drawn from the scientific, legal, public policy and popular literature are used to consider the development of American attitudes about the relationship between people and nature; the relationship between public and private rights in the land, sea, freshwater, atmosphere and wildlife; and the use of innovative property rights regimes in environmental policy. Intermediate coursework in Environmental Studies, Urban Studies, American Civilizations or other environmentally-related coursework is recommended. Enrollment limited to 30.

Fall ENVS1530 S01 14637 TTh 2:30-3:50(11) (C. Karp)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
1550 Nature, Culture, History and the Environment: the Humanistic Lens
When we look at Nature, what do we see? And how is that vision informed by our cultural worldview and social history? Furthermore, how does the way we view Nature affect the way we interact with it? This course explores these questions by examining the way that human societies socially and culturally construct "the environment." It also probes some of the intersections of the environment and myriad humanistic studies—including the lenses of environmental literature and history, environmental film, poetry, indigenous storytelling, and art history. DVPS LILE

Spr ENV51550 S01 26752 Th 4:00-6:20(16) (K. DeMaster)

1560 Sustenance and Sustainability: Exploring the Nexus of Agro-Food Systems, Society, the Environment
Explores the intersections of agriculture, society and the environment. Employing an interdisciplinary perspective, we explore the relationships—social, cultural, environmental and economic—that surround the cultivation, processing, distribution, marketing, preparation and consumption of food. We examine the ways in which contemporary agricultural practices have created environmental and social problems and inequities. Likewise, we also explore ways that alternative agricultural practices, including organic production, food re-localization movements, and community-supported agriculture (to name a few), may offer routes toward human sustenance and sustainability in the face of global environmental crises. Additional requirement: participation in one weekly 60-minute discussion group. DVPS LILE

Spr ENV51560 S01 25899 TTh 1:00-2:20(10) (K. DeMaster)

1565 Sustenance and Sovereignty: Food Justice and Global Agricultural Revolutions
Explores "food sovereignty" and "food justice," examining the potential for these concepts, in the face of the widespread inequities that characterize the current dominant agro-food system, to foster a more just, sustainable institutions and processes. We address the question: how can human societies create a more ecologically, socially, and economically sustainable agriculture, in ways that foster justice and respect for diverse cultures and practices? Topically, we examine agricultural labor practices, intellectual property rights and genetic resources, access to healthy, culturally meaningful foods, global trade policies, and corporate domination of supply chains, among others. Prerequisite: ENVS 1560. Instructor permission required. Enrollment limited to 25.

Fall ENV51565 S01 17007 Th 4:00-6:20(13) (K. DeMaster)

1700D Senior Seminars

1700D Tools for the Trade for Environmental Science Pending Approval. Covers several of the analytical tools used to study environmental problems. Topics include project design and sampling methods, a general background on the chemical and physical principles of instrumental analysis, and statistical techniques applied to instrument calibration and the quality assurance evaluation of analytical results. Includes a weekly 2-hour lab session providing students with hands-on experience of instrumental analysis using absorption and emission spectroscopy, gas and liquid chromatography, and electrochemical methods. Prerequisite: CHEM 0330, GEOL 1370, or permission of instructor.

Spr ENV51700D S01 26531 T 4:00-6:20(16)

1710 Environmental Health and Policy
Provides an overview of environmental health from local to global, addressing fundamental and emerging topics, including air and water pollution, environmental justice, urban and global health, and climatic change and health. Examines scientific and public policy conflicts and framework regarding environmental factors impacting human health. Students develop a basic knowledge of epidemiology, toxicology, and risk assessment, including hazard identification; exposure assessment and fate and transport of environmental toxins; risk management and communication; principles of data interpretation and application to environmental policy-making. Case discussions are utilized. Prerequisite: ENVS 0110 or permission of instructor. Sections arranged based on TA's class schedule.

Fall ENV51710 S01 11784 Th 9:00-10:20(08) (S. Wason)

1720 Environmental Justice: The Science and Political Economy of Environmental Health and Social Justice
Provides an overview of environmental justice history, theory and definitions. Students will review quantitative, qualitative, and theoretical approaches for understanding the origins and persistence of environmental discrimination. Examines the regulatory, institutional, structural, political, and economic forces that underlie patterns of race and class-based discrimination and their implications for environmental health among diverse communities. Case examples of environmental justice organizing will inform students of positive efforts by people of color in protecting their communities. Not open to first year students. Prerequisite: ENVS 0110.

Spr ENV51720 S01 26191 M 3:00-5:20(13) (D. Quigley)

1820 Environmental Health and Disease (BIOL 1820)
Interested students must register for BIOL 1820 S01 (CRN 21169).

1900 Introduction to Geographic Information Systems for Environmental Applications (GEOL 1320)
Interested students must register for GEOL 1320 S01 (CRN 12496).

1920 Analysis and Resolution of Environmental Problems/Case Studies
Combines instruction about how to design research with hands-on experience conducting environmental research. Students develop their own research proposals and begin planning a potential research project for their senior theses or capstone experience. A class research project is developed on local, state, national or global environmental issues, with the aim to serve community groups, government agencies or firms. Projects include urban adaptation to climate change, land use and watershed protection, and justice elements of energy and climate policy. Required for ES concentrators in Junior year. Prerequisite: ENVS 0110 or permission. Enrollment limited to Juniors and Seniors or by permission of instructor.

Spr ENV51920 S01 21298 Th 9:00-10:20(08) (J. Roberts)

1965 Engaged Environmental Scholarship and Communication
This upper level seminar will enable students to place their research in the context of environmentally relevant policy and practice. Development of an environmentally-focused thesis or independent research project is a prerequisite. Students will hone practical professional skills, e.g. how to communicate scientific findings to the media and policy audiences; oral presentation skills, and tips on professional interactions. Required of all Brown Environmental Fellows (http://blogs.brown.edu/befl/), and open to others engaged in environmentally relevant projects from the natural and social sciences and humanities. Enrollment is limited to 15 seniors and graduate students, by application only (available Fall 2011). Instructor permission required. Contact Heather_Leslie@brown.edu for more information. WRIT

Spr ENV51965 S01 25990 W 3:00-5:20(14) (H. Leslie)

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.

Fall

1971 Independent Study
Second semester of individual analysis of environmental issues, required for all environmental studies concentrators. Section numbers

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
106 / French Studies

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.

Spr

(Primarily for Graduates)

2010 Special Topics in Environmental Studies
A mandatory seminar for graduate students in environmental studies. This course develops group problem-solving skills by addressing a current local, national or global environmental issue. We will work on problem definition, identifying options for addressing the problems, and crafting potential solutions. In all stages we work closely with non-profit groups, government agencies, or firms, who have the capacity to implement solutions. Students learn basic research design and begin the process of developing a research question and possible methods for conducting their Master's thesis research.

Fall ENVS2010 S01 11858 M 3:00-5:20(13) (J. Roberts)

2680 Ecosystem Modeling for Non-Programmers
Emphasizes hands-on experience building ecosystem models. Students build about 8 models in an intensive three-week class in January at the Marine Biological Laboratory, then build their own model as a term project over the Spring semester. Term projects will be in the form of a manuscript formatted for publication in Ecology. Prerequisites: Differential Calculus, Integral Calculus, basic grasp of Ecology and Biogeochemistry.

Spr ENVS2680 S01 21319 "To Be Arranged" (E. Rastetter)

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.

Fall; Spr

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.

Fall; Spr

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 ENVS2990 S01 11943 "To Be Arranged"
Spr ENVS2990 S01 21391 "To Be Arranged"

Ethnic Studies see Center for Race and Ethnicity

French Studies

(Primarily for Undergraduates)

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 FREN0100 S01 10651 MF 9:00-9:50 & TTh 10:30-11:50(17)
Fall FREN0100 S02 10652 MF 10:00-10:50 & TTh 10:30-11:50(17)

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 FREN0200 S01 20508 MF 9:00-9:50 & TTh 10:30-11:50(17)
Spr FREN0200 S02 20509 MF 10:00-10:50 & TTh 10:30-11:50(17)
Spr FREN0200 S03 20510 MF 11:00-11:50 & TTh 2:30-3:50(17)
Spr FREN0200 S04 20512 MF 12:00-12:50 & TTh 9:00-10:20(17)
Spr FREN0200 S05 23363 MF 1:00-1:50 & TTh 1:00-2:20(17)
Spr FREN0200 S06 26225 MF 2:00-2:50 & TTh 9:00-10:20(17)

0220 Reading French in the Arts and Sciences
Designed to develop the reading competence in French for graduate students (or advanced undergraduates with permission of the instructor). Fundamentals of grammar and syntax are emphasized as well as reading skills in the fields of individual students. Successful completion should satisfy the foreign language requirement for graduate students in other departments. (Consult the relevant department.) No prerequisites. Not for graduate-level credit.

Sum FREN0220 S01 60286 MTWTh 9:00-11:00 (Y. Kondratiev)

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 an audio CD, 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. Enrollment limited to 18.

Fall FREN0300 S01 10654 MW 9:00-9:50 & T 9:00-10:20(17) (L. Seifert)
Fall FREN0300 S02 10656 MW 12:00-12:50 & T 10:30-11:50(17) (L. Seifert)
Fall FREN0300 S03 13384 MW 1:00-1:50 & T 1:00-2:20(17) (L. Seifert)

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. Enrollment limited to 18.

Fall FREN0400 S01 10657 MW 11:00-11:50(17) (T. Ravindranathan)
Fall FREN0400 S02 10658 MW 1:00-1:50(17) (T. Ravindranathan)
Fall FREN0400 S03 13830 MW 2:00-2:50(17) (T. Ravindranathan)
Spr FREN0400 S01 20540 MW 10:00-10:50(17)
Spr FREN0400 S02 20541 MW 11:00-11:50(17)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
0500 Writing and Speaking French I
A four-skill language course that emphasizes oral interaction in class. Thematic units will focus on songs, poems, a short novel (E-E Schmitt), two graphic novels (Sattouf, Larcenet), films and a detective novel by Fred Vargas. Activities include a creative project using Comic Life, and a systematic grammar review. Prerequisite: FREN 0400, FREN 0200 with written permission, or placement. Enrollment limited to 18.

Sum FREN0500 S01 60369 MTWTh 1:00-3:00 (J. Blaylock)
Fall FREN0500 S02 10687 MWF 9:00-9:50(17)
Fall FREN0500 S03 10688 MWF 10:00-10:50(17)
Fall FREN0500 S04 10689 MWF 11:00-11:50(17)
Fall FREN0500 S05 15091 MWF 2:00-2:50(17)
Spr FREN0500 S01 20542 MWF 9:00-9:50(17)
Spr FREN0500 S02 20543 MWF 12:00-12:50(17)
Spr FREN0500 S03 20544 MWF 2:00-2:50(17)

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.

Fall FREN0600 S01 10706 MWF 9:00-9:50(17) (S. Waryn)
Fall FREN0600 S02 10691 MWF 10:00-10:50(17) (S. Waryn)
Fall FREN0600 S03 10695 MWF 10:00-10:50(17) (S. Waryn)
Fall FREN0600 S04 10696 MWF 12:00-12:50(17) (S. Waryn)
Fall FREN0600 S05 16744 MWF 2:00-2:50(17) (S. Waryn)
Spr FREN0600 S01 20548 MWF 9:00-9:50(17) (T. Ravindranathan)
Spr FREN0600 S02 20549 MWF 10:00-10:50(17) (T. Ravindranathan)
Spr FREN0600 S03 20550 MWF 12:00-12:50(17) (T. Ravindranathan)
Spr FREN0600 S04 20551 MWF 1:00-1:50(17) (T. Ravindranathan)
Spr FREN0600 S05 20552 MWF 2:00-2:50(17) (T. Ravindranathan)

0720 First Year Seminar
Enrollment limited to 20 first year students.

0720A From Courtly Love to Postmodern Desire
From twelfth-century courtly literature to contemporary film, this course explores the enduring romance between French culture and Eros. The ambiguities of desire are brought to the fore across changing religious and social contexts. Readings include Duras, Flaubert, Freud, and Baudrillard. Open to students who receive a 5 (AP test), 700 and above (SAT II) or with instructor's permission. Open to first year students only. Please email Virginia_Krause@brown.edu if you have questions. FYS

Spr FREN0720A S01 26477 MWF 1:00-1:50(06) (V. Krause)

0760 Intensive Introduction to Literature and Literary Methods
0760A Introduction à l'analyse littéraire
On what terms and with what tools can we "read" a literary text? An introduction to major periods and genres (the short story, the novel, poetry, theater) of French and Francophone literature and to a range of analytical approaches to the text, including narrate theory, poetics, psychoanalysis and gender studies.

Fall FREN0760A S01 16786 TTh 1:00-2:20(10) (G. Schultz)

(For Undergraduates and Graduates)

0760B "French Lovers"; Séduction et libertinage sous l'Ancien Régime
A study of love and relationships in the Old Regime. The course will concentrate on the major actors (the libertine, the fop), on the spaces (the boudoir, the salon, the garden), on social practices (conversation). Authors will include Molière, Mme de Lafayette, Crébillon fils, Laclos, Sévigné. 10 films. Two short papers, two oral presentations, a weekly blog, and a final project (paper or multimedia project).

Spr FREN1130B S01 26797 Th 4:00-6:20(16) (E. Ahearn)

1130 Special Topics in French Studies I
1310A "French Lovers"; Séduction et libertinage sous l'Ancien Régime
A study of love and relationships in the Old Regime. The course will concentrate on the major actors (the libertine, the fop), on the spaces (the boudoir, the salon, the garden), on social practices (conversation). Authors will include Molière, Mme de Lafayette, Crébillon fils, Laclos and film adaptations by Honoré, Frears, and Forman.

Fall FREN1310A S01 16746 TTh 10:30-11:50(09) (P. Saint-Amand)

1310E Paris, ville des Lumières
Representations of the city; the crowd, the rise of the individual, the narrator as spectator and promeneur; narratives of social mobility, speed and circulation; sex and the city; gender anxieties and myth of decadence; Paris as a cultural place. Various authors to be studied: Marivaux, Monbron, Rousseau, Diderot, Mercier, Restif de la Bretonne.

Spr FREN1310E S01 26479 TTh 1:00-2:20(10) (P. Saint-Amand)

1410 French Culture and Civilization
1410Q Boulevard du Crime
A study of crime and criminality in relation to French culture and literature during the 19th and 20th centuries. Readings in a variety of fictional and non-fictional sources including short stories, detective fiction, novels, trials, memoirs, and criminological treatises.

Fall FREN1410Q S01 17045 TTh 2:30-3:50(11) (G. Schultz)

1510 Advanced Written and Oral French
Follows FREN 0600 in the sequence of language courses. Development of oral and written skills via presentations, debates, conversation, and discussions on a variety of topics.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
108 / Gender and Sexuality Studies
Fall 2011 (CRN 10714): Travel and Travelers: Through novels, articles, movies, videos, and discussions, this course will analyze types of travels and travelers: the nomad, the explorer, the navigator, the student, the tourist, the missionary, the immigrant, etc. Instructor permission required.

Spring 2012 (CRN 20561): Cultura: This virtual exchange with a French school will help students prepare for study abroad through the exploration of cultural differences as expressed in language, books, memoirs, newspapers and films. Instructor permission required. Enrollment limited to 18.

1610 Advanced Written French
Enrollment limited to 17.

1610A Ateliers 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 17. Instructor permission required.

Spr FREN1610A S01 26798 MWF 11:00-11:50(17) (Y. Kervennic)

1900 Senior Seminar

1900D L'Utopie littéraire
For centuries literary utopias have reinvented the world according to Western desires and values. In Europe, utopias have allowed writers to protect their dreams and fantasies on foreign territories. Utopian texts and films will be studied in order to better understand the role utopias have played in shaping the imaginary of generations in France. Novels, essays, films by Campanella, Voltaire, Marivaux, Mercier, Sand, Verne, Boule, Topor, and others. Enrollment limited to 20.

Spr FREN1900D S01 26480 W 3:00-5:20(14) (R. Bensmaia)

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.

Fall; Spr

(Primarily for Graduates)

2130 Studies in French Literature of the Seventeenth Century

2130F Façons d'aimer: Discourses of Sexuality in Early Modern France
This course will examine both the connections and tensions among the legal, literary, philosophical, medical, and religious discourses of sexuality in early modern France. Topics such as Neoplatonism, erotomania, one-gender theory, conjugal love, cuckoldry, impotence, sodomy, and tristidm will be studied in their historical, social, and literary contexts. In addition to primary sources (selections from edicts, essays, treatises) and secondary readings (theoretical and critical), literary texts by Rabelais, Ronsard, Labé, Montaigne, Vial, Molière, Choisy, among many others. Class discussions in English or French, depending on preparation of students. Enrollment limited to graduate students or advanced undergraduates (with instructor’s permission only).

Spr FREN2130F S01 26781 F 3:00-5:20(15) (L. Seifert)

2150 Studies in French Literature of the Eighteenth Century

2150D Qu'est-ce que les Lumières?
An examination of major and minor authors of the French Enlightenment from the point of view of the capital ideas that have dominated the century: pleasure and taste, reason and violence, gender and race. Examines the reception of the Enlightenment by contemporary theorists and historians, principally Foucault, Habermas. Readings in Montesquieu, Denon, Graffigny, Boyer d'Argens, Diderot and Rousseau.

Fall FREN2150D S01 16748 M 3:00-5:20(13) (P. Saint-Amand)

2170 Studies in French Literature of the Nineteenth Century

2170G Decadence
Study of the notion of decadence in fin-de-siècle French culture. From scientific theories of degeneration to literary representations of sexual perversion, writers of the period were consumed by the specter of moral decay and social disease. This course will analyze fictional and non-fictional texts of the period by authors such as Péladan, Lorrain, Rachilde, Mendès, and Nordau.

Spr FREN2170G S01 26481 W 3:00-5:20(14) (G. Schultz)

2190F L'honneur des poètes
This course will focus on literary and cinematic treatments of the wars that marked French modernity. We will consider these traumatic rupturings of space, time, body, identity and memory as they are recorded or responded to in poetry, prose and film, and as they reorder the stakes of form and of narrative meaning. We will discuss Surrealist, Dadaist, Resistant responses to war, major novels and films dealing with the second world war, occupation and the Algerian war (Perec, Simon, Duras, Resnais, Modiano, Daeninckx, Denis, Bouchareb, Dumont), and theoretical writings on war and representation (Benjamin, Sartr, Baudrillard, Virilio, Ricouer, Derrida, Scarry).

Fall FREN2190F S01 17030 W 3:00-5:20(14) (T. Ravindranathan)

2900 Theory and Methods of Foreign Language Teaching
Introduction to the theoretical and practical aspects of foreign language learning and teaching. Specific topics include theories of language acquisition, an overview of teaching practices and the principles underlying them, selection and evaluation of textbooks, teaching materials, and learner variables. Students observe beginning language courses and do micro-teaching. Taught in English. Undergraduates may enroll with instructor's permission.

Spr FREN2900 S01 26482 'To Be Arranged'

2970 Preliminary Examination Preparation
For graduate students who have completed their course work and are preparing for a preliminary examination.

Fall FREN2970 S01 10747 'To Be Arranged'
Spr FREN2970 S01 20591 'To Be Arranged'

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; Spr

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

Fall FREN2990 S01 10884 'To Be Arranged'
Spr FREN2990 S01 20674 'To Be Arranged'
Gender and Sexuality Studies

(Primarily for Undergraduates)

0090 First Year Seminar
These seminars for first year students provide an introduction to the study of gender and sexuality in social, cultural, political, economic, or scientific contexts. Enrollment limited to 20 first year students. FYS

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. FYS DVPS WRIT Instructor’s permission required.

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 20155 MWF 10:00-10:50(03) (D. Weinstein)

(For Undergraduates and Graduates)

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. Instructor’s permission required.

Fall

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. Instructor’s permission required.

Spr

1960 Special Topics in Gender and Sexuality Studies

1960D Feminist Theory/Feminist Activism
Some complain that feminist theory is "too academic", that it has no ties to social justice or activism. On the other hand, there are those in the academy who accus gender/women's studies of not being sufficiently academic, of not being intellectually rigorous. With those two stereotypes in mind, we will read a variety of feminist theorists, some generally thought of as "academic", and some generally seen as "activist". Can academic theory be useful to political and social activists? Can activism inform academic theorizing? Prerequisite: one theory course, one gender and sexuality studies course, or permission of instructor.

Fall GNSS1960D S01 16640 TTh 9:00-10:20(08) (G. Cohee)

1960N Theories and Politics of Sexual Consent

Gender and Sexuality Studies
What is sexual consent good for? Does the language of sexual consent facilitate useful ethical interrogation? Or does it neutralize any worthwhile inquiry into power inequalities? This course investigates sexual consent through surveying political theory texts, liberal and feminist legal scholarship, studies in sex and gender, court cases, and literature. We query how and to what effect the idea of consent organizes sexual politics and politicizes sex. We first consider consent in legal and political discourse; we next turn to modern theories and discourses of sexual consent; we then explore case studies. The last weeks focus on youth. Enrollment limited to 20. Instructor permission required.

Fall GNSS1960N S01 17292 T 4:00-6:20(13) (J. Fischel)

1960O Desiring the Nation: Gender and Nationalism in South Asia
Examines the development and afterlives of nationalisms in South Asia to consider the attachments that tie citizens and subjects to the nation and to one another. What are the political, personal, and ideological commitments that allow or prevent individuals from belonging to the nation? Beginning with early 20th century anticolonialism, we trace multiple nationalist movements that lead up to the 1947 Partition of British India, and to the 1971 independence of Bangladesh. Through novels, short stories, and film, we will examine the role of gender in anticolonial protest and in early nation-building in India, Pakistan, and Bangladesh. Enrollment limited to 20.

Fall GNSS1960O S01 17218 Th 4:00-6:20(13) (P. Saha)

1960P Post-Colonial Technoscience and the Body
This seminar examines the intersections of race, gender, culture, and sexuality with science and technology in colonial and post-colonial contexts. How is the body a site of contestation for power enacted through medical, scientific, or technological interventions? What are the social and historical dimensions of such encounters between the global North and South? Drawing on colonial-era primary sources and accounts by science studies scholars, post-colonial theorists, historians, and anthropologists, we analyze how the uneven flow of technoscientific expertise, practices, objects, and knowledge reconfigures and transforms bodies, selves, and societies. The course’s geographic focus is sub-Saharan Africa. Enrollment limited to 20.

Spr GNSS1960P S01 27070 T 4:00-6:20(13) (C. Biruk)

1970 Directed Research and Thesis
Independent research under the direction of a faculty member, leading to a thesis. Required of honors candidates. Open to seniors only. Instructor permission required.

Fall

1980 Directed Research and Thesis
Independent research under the direction of a faculty member, leading to a thesis. Required of honors candidates. Open to seniors only. Instructor permission required.

Spr

1990 Senior Seminar
A research seminar focussing on the research and writing of the participants. Required of senior concentrators; open to other advanced students by permission.

Fall GNSS1990 S01 14178 W 3:00-5:20(14) (E. Katz)

(Primarily for Graduates)

2010 The Pembroke Research Seminar in Feminist Theory
An advanced research seminar in feminist theory and gender studies. Presentations made by Brown faculty, Pembroke Center fellows, visiting scholars, and students. Offered in conjunction with the Pembroke Seminar. Enrollment Limited to 8.

2010E Pembroke Research Seminar: The Question of Consent

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
110 / Gender and Sexuality Studies

No description available. Instructor's permission required.

Fall  GNSS2010E  S01  16641  W 10:00-12:20(03)  (S. Stewart-Steinberg)
2020  The Pembroke Research Seminar in Feminist Theory
An advanced research seminar in feminist theory and gender studies. Presentations made by Brown faculty, Pembroke Center fellows, visiting scholars, and students. Offered in conjunction with the Pembroke Seminar. By instructor permission only. Enrollment Limited to 8.

2020E Pembroke Research Seminar: The Question of Consent
No description available. Instructor's permission required.

Spr  GNSS2020E  S01  26390  W 10:00-12:20(03)  (S. Stewart-Steinberg)

Fall XLIST Courses of Interest to Concentrators in Gender and Sexuality Studies
Courses appropriate for concentration credit.
The following courses have a primary focus on women or gender or make significant use of modes of feminist or queer analysis. They count toward the concentration in Gender and Sexuality Studies. Please check with the sponsoring department for times and locations.
Africana Studies
AFRI 0600 Race, Gender, and Urban Politics
AFRI 1050G Narrating the Radical Self
AFRI 1110 Voices Beneath the Veil
Judaic Studies
JUDS 0990F Sexuality and Religion
Modern Culture and Media
MCM 1201E Feminist Theory and the Question of Sexual Subjectivity
Sociology
SOC 0230 Sex, Gender, and Society

Related courses.
The following courses address issues of women, gender and/or sexuality for part of the semester. They may count toward the concentration with permission of the concentration advisor. Please check with the sponsoring department for times and locations.
Africana Studies
AFRI 0880 Hip Hop Music and Cultures
AFRI 1050E Research-to-Performance Method (RPM) Playwriting Workshop
Anthropology
ANTH 2310A Violence, Governance and Transnationalism
Biology
BIOL 1920C Social Contexts of Disease
English
ENGL 1360K Shakespeare and Company
ENGL 1510A By a Lady: Jane Austen and Her Predecessors
ENGL 1900R Queer Relations: Aesthetics and Sexuality
German Studies
GRMN 0750B Tales of Vampirism and the Uncanny
Political Science
POLS 1310 African American Politics
POLS 1430 Roots of Radical Islam
POLS 1821W Politics of Race and Gender

Spring XLIST Courses of Interest to Concentrators in Gender and Sexuality Studies
Courses appropriate for concentration credit.
The following courses have a primary focus on women or gender or make significant use of modes of feminist or queer analysis. They count toward the concentration in Gender and Sexuality Studies. Please check with the sponsoring department for times and locations.
Africana Studies
AFRI 0710A Racial and Gender Politics in Contemporary Brazil
AFRI 0990 Black Lavender: A Study of Plays with LGBTQ Content
AFRI 1440 Theorizing the Black Diaspora
American Civilization
AMCV 0190C American (Mass)cultures: Sexuality, Race and Aesthetics

AMCV 0190X Gendered Mobility: Migrant Women Workers in a Globalized Economy
Classics
CLAS 1750 Erotic Desire in the Premodern Mediterranean
Comparative Literature
COLT 2830I Histories of the Early Modern Body
East Asian Studies
EAST 1950B Chinese Women, Gender and Feminism from Historical and Transnational Perspectives
EAST 1950X Queer Japan: Culture, History and Sexuality
English
ENGL 0650K The Roaring Twenties
French
FREN 2130 Discourses of Sexuality in Early Modern France
History
HIST 1755 The Intimate State: The Politics of Gender, Sex, and Family in the U.S., 1873-Present
HIST 1976E Women & Gender Relations in China, Past and Present
Italian Studies
ITAL 2550 Gender Matters
Judaic Studies
JUDS 0990J Body and Society: Medicine and Medical Ethics in the Pre-Modern World
JUDS 1981J Gender, Sex, and Crime in Modern Yiddish Culture
Modern Culture and Media
MCM 1501O Television, Gender, Sexuality
Religious Studies
RELS 0290D Women, Sex and Gender in Islam
Russian
RUSS 1450 Love and Sexuality in Russian Literature in the European Context
Related courses.
The following courses address issues of women, gender and/or sexuality for part of the semester. They may count toward the concentration with permission of the concentration advisor. Please check with the sponsoring department for times and locations.
Africana Studies
AFRI 1050E Research-to-Performance Method (RPM) Playwriting Workshop
Anthropology
ANTH 1251 Violence and the Media
Political Science
POLS 0820G Race and Political Representation
POLS 1270 Politics and Economies in the Middle East
POLS 1821X Politics of Social Welfare in the Middle East
POLS 2190 Comparative & Global Politics of the Welfare State

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Geological Sciences

(Primarily for Undergraduates)

0050 Mars, Moon, and the Earth
Space exploration has revealed an astonishing array of surface features on the planets and their satellites. Why are atmospheres on the planets different from Earth's atmosphere? Do other planets represent our past or future environment? Is there life on other planets? The planets and their histories are compared to gain insight and a new perspective on planet Earth.

Fall GEOL0050 S01 12479 MWF 2:00-2:50(07) (J. Head)

0070 Introduction to Oceanography
Examines the ocean's role in global (and local) change, emphasizing the ocean as an evolving, dynamically balanced ecosystem. Focus on physical/chemical/biological systems' interconnections needed to understand the natural variability of the ocean on various time and space scales, from El Niño to global warming. Three lectures, one section meeting weekly; written exercises on oceanographic problems; two field trips to study estuarine and coastal processes.

Spr GEOL0070 S01 21690 MWF 2:00-2:50(07) (S. Clemens)

0160 First-Year Seminar
These seminars for first-year students provide an introduction to Earth, planetary and environmental science through in-depth exploration of topics at the forefront of scientific research and their application to society. Sections provide a highly interactive learning environment and emphasize critical reasoning, research methods, interdisciplinary connections, and effective oral and written communication. No prerequisites. Enrollment limited to 20 first year students. FYS

Fall GEOL0160C S01 16731 MW 10:00-10:50(03) (J. Mustard)

0160H Chicken Little or Armageddon? Past and Future Cosmic Threats
Explore the probability of the next impact on the Earth and assess the possible consequences through historic times (incidents), folklore/legends, examples in recent geological time (last 10 million years), and the catastrophic consequences 65 million years ago. Strategies for searching and possible mitigation of the next "big one" will be considered. This seminar will explore the realities of various predictions, consider public policy, investigate strategies for prevention, and assess the role of the press in shaping perceptions. Enrollment limited to 20 first year students. FYS

Fall GEOL0160H S01 16732 TTh 10:30-11:50(09) (P. Schultz)

0160I Diamonds
Examines both the science and human history of diamonds, and shows how they have interacted over the years. Investigates how and where diamonds are formed in nature and what they tell us about the Earth. At the same time, explores the role diamonds have played in our history and culture. CAP course. Enrollment limited to 12 first year students. FYS WRIT

Spr GEOL0160I S01 26750 TTh 2:30-3:50(11) (S. Parman)

0220 Physical Processes in Geology
Introduction to the form and origin of interior and surface features of Earth, with emphasis on understanding the physical processes that produced them. Topics include interior processes (plate tectonics, mountain building, volcanism, earthquakes, and flow of solid rocks) and surface processes (atmospheric and oceanic circulation, flow of rivers, glaciers, and groundwater). Laboratory and 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 waitlist. Please see or email instructor (Jan_Tullis@brown.edu).

Fall GEOL0220 S01 12480 MWF 11:00-11:50(04) (J. Tullis)

0230 Geochemistry: 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 isotope models; 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 21695 TTh 1:00-2:20(10) (R. Cooper)

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 21696 MWF 11:00-11:50(04) (T. Herbert)

0310 Fossil Record
Integrated view of the history of life: biogeochemical cycles, biodiversity, evolution by natural selection, ecology, and physiology along a multiplicity of scales from the microbial to the planetary, as recorded in the fossil record. Attention is given to how biotic systems, in contrast to just physical systems, have changed through time maintaining the chemical and thermodynamic non-equilibrium state of the Earth's surface. Two lectures per week; several labs including dissections for paleobiological comparisons and one field trip to fossil localities and museum collections in Connecticut and Massachusetts. Prerequisites: GEOL 0220 or 0230 or 0240, BIOL 0200, or instructor permission.

Fall GEOL0310 S01 12486 TTh 1:00-2:20(10) (J. Whiteside)

0810 Planetary Geology
Examines the geology of solid planets. Focuses on a mission to Mars through an understanding of processes that shape planetary surfaces. Terrestrial analogs, conceptual models, and laboratory simulations are used as reality checks. Integration of these processes through time reveals the geologic evolution of the planets. Three lectures and one discussion session per week. CAP course. Prerequisite: GEOL 0010 or 0050, or 0220, or instructor permission.

Spr GEOL0810 S01 21698 MWF 2:00-2:50(07) (P. Schultz)

(For Undergraduates and Graduates)

1110 Estuarine Oceanography
Examines physical, chemical, and biological characteristics of local estuaries using field measurements, analysis of field data, and interpretation of processes; field investigation results will be prepared as a cooperative class report. Topics include: tidal and circulation processes, salinity and freshwater fluxes, watershed pollutants, estuary flushing rates, and estuary ecosystems. Primarily for students

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Fall GEOL1110 S01 14282 MWF 1:00-1:50(06) (W. Prell)

1150 Limnology: The Study of Lakes
This course will provide an interdisciplinary overview of the physics, chemistry, biology, and geology of lakes. Areas of emphasis will include the origin of lake basins, water circulation patterns, heat and water budgets, biogeochemical processes, lake ecosystems, and the stratigraphic record of lakes. We will also discuss human and climatic impacts on lakes. Prerequisites: GEOL 0070, 0240, or ENVS 0490, or instructor permission. Enrollment limited to 20. WRIT

Spr GEOL1150 S01 25547 MWF 11:00-11:50(04) (J. Russell)

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 Phanerozoic 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 12494 TTh 10:30-11:50(09) (J. Russell)

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, and database design are covered. Related work in image databases also discussed. Extensive hands-on training in ESRI-based geographic information system software will be provided. Focal point of class is the completion of student-selected research project employing GIS methods. Enrollment limited to 20. After pre-registration, instructor permission is required to register or get on wait-list. Please see or email instructor.

Fall GEOL1320 S01 12496 TTh 1:00-2:20(10) (L. Carlson)

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 24195 TTh 1:00-2:20(10) (J. Mustard)

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. After pre-registration, an instructor override is required to register or get on a wait-list. Please see or email instructor: Meredith.Hastings@brown.edu. Enrollment limited to 30. WRIT

Spr GEOL1350 S01 23834 TTh 2:30-3:50(11) (M. Hastings)

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.

Fall GEOL1370 S01 12498 TTh 9:00-10:20(08) (Y. Huang)

1380 Environmental Stable Isotopes
Introduction to the concepts, analytical methods, theory and environmental applications of stable H, O, C, N and S isotopes. Emphasis will be placed on theory and applications of light isotopes in paleoclimate studies, environmental hydrogeology and biogeochemistry. Prerequisites: CHEM 0100, GEOL 0220 or 0230 recommended, or instructor permission.

Spr GEOL1380 S01 25548 MWF 9:00-9:50(02) (Y. Huang)

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.

Fall GEOL1410 S01 12499 MWF 10:00-10:50(03) (Y. Liang)

1420 Petrology
Introduction to the origin of igneous and metamorphic rocks. Emphasis on principles and understanding rather than facts and memorization. Principles are used to extract information concealed in the rocks about their formation, processes, sources and evolution with time. Laboratory work focuses on rock hand samples and microscopic textures. Field trips, laboratory arranged. Prerequisites: GEOL 1410, or instructor permission.

Spr GEOL1420 S01 21703 MW 9:00-10:20(02) (A. Saal)

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 220 or instructor permission. WRIT WRIT

Spr GEOL1450 S01 21704 TTh 10:30-11:50(09) (J. Tullis)

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 12511 MWF 11:00-11:50(04) (D. Forsyth)

1960 Special Topics in Geological Sciences
Enrollment limited to 20.

1960A Rheology of the Crust and Mantle
Introduces the principles of rock mechanics and uses them to describe brittle and ductile deformation processes in the crust and mantle. Each topic will review experimental constraints on deformation mechanisms and introduce the theories that support their application to geological conditions. Analyze microstructural observations in real rocks to link
what is learned in the lab to what actually is seen in the Earth. Topics to be covered include: brittle fracture and crack propagation, frictional sliding, the brittle/plastic transition, viscous deformation mechanisms, microstructural analysis of deformed rocks, and the scaling and extrapolation of laboratory flow laws. The class will also feature a field trip to well-exposed crustal faults and shear zones. Several class periods and a class project will focus on microstructural observations of rocks collected during the field trip. Pre-requisite: GEOL 1450 or permission of instructor. Enrollment limited to 20.

Fall GEOL1960A S01 16734 TTh 10:30-11:50(09) (J. Hirth)

1970 Individual Study of Geologic Problems
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.

Fall; Spr

(Primarily for Graduates)

2430 Igneous Petrology
Study of mineral equilibria in igneous rocks in relation to theoretical and experimental studies in silicate systems. Principles of the origin and evolution of igneous rocks in space and time. Offered alternate years.

Fall GEOL2430 S01 17006 MWF 10:00-10:50(03) (S. Parman)

2460 Phase Equilibria
Principles of thermodynamics and phase equilibria in unary, binary, ternary, and multicomponent systems using analytical and graphical methods. Other topics include: solution theory, equations of state, and thermodynamics of surfaces.

Fall GEOL2460 S01 16735 MW 8:30-9:50(02) (R. Cooper)

2650 Advanced Seismology
The theory of modern seismology will be applied to imaging of Earth structure (from local to global scales) and determination of earthquake source models. Topics include elastic wave propagation, representation theorems, seismic tomography, moment tensors, source-time functions, and models of fault rupture. Offered alternate years. Prerequisite: GEOL 1650.

Spr GEOL2650 S01 26471 TTh 10:30-11:50(09) (K. Fischer)

2730 Isotope Geochemistry
A survey course emphasizing fundamental principles in isotope geochemistry, including nuclear systematics, nucleosynthesis, geochronological and stable isotope systems, and the application of radiogenic and stable isotopic tracers to geological problems. Prerequisites: GEOL 1410 and 1420, or instructor permission.

Fall GEOL2730 S01 12513 TTh 9:00-10:20(08) (L. Gromet)

2860 Planetary Volcanology
An examination of volcanism using observations of features and deposits on planetary bodies, comparing them to predictions from the theory of magma ascent and emplacement. Attention to the influence of different variables (e.g. gravity, composition, temperature, pressure, and atmospheric effects). The history of planetary volcanism, its relation to thermal evolution, and comparative planetary volcanology are also addressed. Offered alternate years.

Spr GEOL2860 S01 26472 W 3:00-5:20(14) (J. Head)

2910 Special Topics in Geological Sciences

2910G Dynamics of Ice Sheets and Glaciers
Fall GEOL2910G S01 16736 W 3:00-5:20(14) (J. Hirth)

2920 Special Topics in Geological Sciences

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.

Spr GEOL2920H S01 26473 W 3:00-5:20(14) (T. Herbert)

2920N Problems Antarctic Dry Valley Geoscience
The Antarctic Dry Valleys represent an extreme hyperarid polar desert environment. Their geomorphology records the range of processes operating in these environments, preserving a record of climate change over millions of years. Major microenvironments are studied at the micro-, meso-, and macro-scale through literature review, field analyses, and research projects. Exobiological themes and climate change on Mars will be assessed.

Spr GEOL2920N S01 25970 M 3:00-5:20(13) (J. Head)

2920V Terrestrial Nitrogen and Carbon Cycling
This seminar course will examine aboveground and belowground processes in the context of the global nitrogen and carbon cycles, and the impacts of both natural and anthropogenic disturbances. The course will include discussion of processes such as (de)nitrification, N-fixation, respiration, photosynthesis, and decomposition and their relationship to soil properties; the coupling of N and C cycles in soils related to climate change and increasing N deposition. This course will include an emphasis on emerging new techniques to quantify N and C processes in the laboratory, field and through modeling, and will include a field trip to investigate current field studies. Prerequisites: BIOL 1480 or GEOL 1130 or equivalent biogeochemistry course. Instructor permission required.

Spr GEOL2920V S01 26224 M 1:00-1:50 & W 1:00-2:50(06) (M. Hastings)

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 GEOL2970 S01 15736 "To Be Arranged"
Spr GEOL2970 S01 25558 "To Be Arranged"

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. Reserved for: Fall; Spr

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

Fall GEOL2990 S01 12936 "To Be Arranged"
Spr GEOL2990 S01 21778 "To Be Arranged"

Greek see Classics

German Studies

German Studies

(Primarily for Undergraduates)
114 / German Studies

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. Enrollment limited to 20.

Fall GRMN0100 S01 11351 MWF 11:00-11:50 & T 12:00-12:50(17) (J. Sokolosky)
Fall GRMN0100 S02 11353 MWF 12:00-12:50 & T 12:00-12:50(17) (J. Sokolosky)
Fall GRMN0100 S03 11355 MWF 1:00-1:50 & T 12:00-12:50(17) (J. Sokolosky)

0110 Intermediate Beginning German
Students who wish to complete the GRMN 0100-0200 sequence in one semester may do so by enrolling in GRMN 0110 for two semester course credits. There are six hours per week in small drill sections conducted by fluent undergraduate teaching apprentices. Another three hours of class will be conducted by the faculty instructor. Students must register for both the lecture section and one conference. Enrollment limited to 16.

Spr GRMN0110 S01 20954 TTh 9:00-10:20(08) (A. Brueggemann)

0120 German for Reading
Intensive introduction to German grammar and syntax for students without prior knowledge of German. Primarily for graduate students but also open to undergraduates. The student who successfully completes this course will have the necessary foundation for reading German texts.

Spr GRMN0120 S01 25926 W 3:00-5:20(13)

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 and participate in the annual film festival. This is the second half of a year-long course. Students must have taken GRMN 0100 to receive credit for this course. The final grade for this course will become the final grade for GRMN 0100. If GRMN 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 20.

Spr GRMN0200 S01 20958 MWF 11:00-11:50 & T 12:00-12:50(17) (J. Sokolosky)
Spr GRMN0200 S02 23821 MWF 12:00-12:50 & T 12:00-12:50(17) (J. Sokolosky)
Spr GRMN0200 S03 26247 MWF 1:00-1:50 & T 12:00-12:50(17) (J. Sokolosky)

0300 Intermediate German I
Focuses on deepening students' understanding of modern German culture by reading texts and viewing films pertinent to German 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 11363 MWF 10:00-10:50 & Th 12:00-12:50(17) (J. Sokolosky)
Fall GRMN0300 S02 11364 MWF 2:00-2:50 & Th 12:00-12:50(17) (J. Sokolosky)

0400 Intermediate German II
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.

Spr GRMN0400 S01 20961 MWF 10:00-10:50 & Th 12:00-12:50(17) (J. Sokolosky)
Spr GRMN0400 S02 20962 MWF 2:00-2:50 & Th 12:00-12:50(17) (J. Sokolosky)

0500 Advanced German I
While continuing to work on all four language skills students gain more intensive knowledge of topics in twentieth-century German culture. Recommended prerequisite: GRMN 0400. WRIT

0500F Modern 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

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.

0600 Advanced German II
While continuing to work on all four language skills students gain familiarity with fundamental concepts in German cultural history. Recommended prerequisite: one course in the GRMN 0500 series.WRIT

0600C From Faust to Freud: Germany's Long 19th Century
In the 19th century, a fundamental renegotiation took place about what it means to be German. Literary, aesthetic, and philosophical discourses played a decisive role in these deliberations on German identity. We will study seminal texts from these fields and discuss how they shaped German self-understanding in the 20th century and beyond. Readings by Goethe, Büchner, Stifter, Wagner, Nietzsche, Raabe, Fontane, George, Freud, among others. In German. Prerequisite: GRMN 0500. LILE

Spr GRMN0600C S01 26794 MWF 9:00-9:50(02) (T. Kniesche)

0750 First Year Seminars
Enrollment limited to 20 first year students. FYS

0750B Tales of Vampirism and the Uncanny
This course compares literary texts of horror and haunting in English and German Romanticism. The psychoanalytic foundations of vampirism are discussed to enable students to boldly go beyond mere fandom and engage these texts on a more sophisticated level. Readings by Walpole, Coleridge, Poe, Tieck, E.T.A. Hoffmann and others. In English. Enrollment limited to 20 first year students. FYS

Fall GRMN0750B S01 16619 TTh 10:30-11:50(09) (T. Kniesche)

0990 German Literature in Translation

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public.P_Main).
This course provides students who don't read German with an opportunity to study German literature in translation. Course topics include the German novel, German poetry, and German drama. In English. LILE

**0990C Introduction to Scandinavian Literature**
An introduction to major works of Scandinavian writers, painters and filmmakers over the past 150 years. Figures include Kierkegaard, Ibsen, Strindberg, Munch, Hamsun, Josephson, Sodergran, Lagerkvist, Vesaas, Cronqvist, August and Vinterberg, as well as children's books by Astrid Lindgren and Tove Jansson. In English. LILE

Spr GRMN0990C S01 25454 TTh 10:30-11:50(09) (A. Weinstein)

(For Undergraduates and Graduates)

**1320 Classical German Literature**
Introduction to the German literature of the eighteenth century. In German or English.

**1320E Classical German Literature: Goethe und die Klassik**
The anthropology and aesthetics of Weimar Classicism. Readings of major works by Johann Wolfgang Goethe and Friedrich Schiller, with discussion of selected texts by Herder, Humboldt, and Kant. In German. Pre-requisite: GRMN0600 or placement.

Fall GRMN1320E S01 16616 TTh 2:30-3:50(11) (T. Kniesche)

**1340 The Modern Period**
Introduction to the German literature of the twentieth and twenty-first century. In German or English.

**1340L The Modern Period**
Explores the fascinating flowering of modernity in Germany, including the period around 1900 (adolescent Angst and the new Broadway version), Weimar culture (revolution, women's emancipation), Nazi culture, and exile literature in socio-historical context; including examples from film, art, and popular culture. Authors may include: Wedekind, Brecht, Kafka, T. Mann, Toller, Keun. In German. Recommended prerequisite: GRMN 0600 or equivalent.

Fall GRMN1340L S01 16617 MWF 10:00-10:50(03) (C. Poore)

**1440 Studies in Literary Genre**
Introduction to particular genres in German literature. In German or English.

**1440O Modern German Drama**
Explores the fascinating modern German dramatic tradition from the 19th century to the present, emphasizing plays that are still a part of the stage repertory today and authors that have exerted a strong international influence. Authors may include: Büchner, Wedekind, Brecht, Toller, Dürrenmatt, Frisch, Weiss, Heiner Müller. In German. Recommended prerequisite: GRMN 0600 or permission.

Spr GRMN1440O S01 26369 TTh 10:30-11:50(09) (C. Poore)

**1660 Studies in German Culture**
Interdisciplinary approaches to German culture. In German or English.

**1660B Berlin: A City Strives to Reinvent Itself**
Contemporary Berlin buzzes with energy, yet this metropolis is characterized by the legacy of fascism and divided government. The city as cultural space will be interrogated in interdisciplinary ways. Topics range from Weimar culture and Nazi architecture to the Cold War and German reunification. In English with possible extra session for students who have completed GRMN 0400 or higher. LILE

Spr GRMN1660B S01 26370 TTh 1:00-2:20(10) (C. Poore)

**1900 Senior Seminar**
Advanced students of German culture will pursue their own interests pertaining to a designated topic related to the humanities in general. Common readings, general discussions and individual class presentations will facilitate the development of individual projects. In German and English. Required for concentrators, written permission required for others.

**1900E Made in Germany - A Cultural History of Science, Technology, and Engineering**
In this seminar, we will examine the German technological imagination in literature and film. The material to be studied reaches from nineteenth and early twentieth century German Science Fiction to the history of engineering giants such as Volkswagen or BMW and will also include philosophical reflections of technology, the role of the German engine as hero, and the image of the mad scientist. A field trip to Germany during spring break is planned. In German. Prerequisite: GRMN 0600. Open to seniors only. LILE

Spr GRMN1900E S01 26796 W 3:00-5:20(14) (T. Kniesche)

**1970 Independent Study**
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; Spr

**1990 Senior Conference**
Special work or preparation of an honors thesis under the direction of a faculty member. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall; Spr

(Primarily for Graduates)

**2660 Interdisciplinary Studies**
Graduate work in interdisciplinary aspects of German Studies. In German or English.

**2660A On the Sublime**
Survey of major theories of the sublime from antiquity to modern times, with emphasis on German, British, and French texts from the 18th to 20th centuries. Authors to be read include Longinus, Immanuel Kant, Edmund Burke, Jean-Francois Lyotard, and Neil Hertz. Readings and discussions in English, with optional readings in original languages provided. Open to seniors with instructor's permission.

Fall GRMN2660A S01 16618 W 3:00-5:20(14) (Z. Sng)

**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 11386 'To Be Arranged'
Spr GRMN2970 S01 20993 'To Be Arranged'

**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.

Fall; Spr

**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 11399 'To Be Arranged'
Spr GRMN2990 S01 21003 'To Be Arranged'

Fall XLIST Courses of Interest to Students Concentrating in German Studies

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Spanish

(Primarily for Undergraduates)

0400 Intermediate Swedish II
Continuing Swedish. Recommended prerequisite: SWED 0300.
Spr  SWED0400  S01  25920  TTh 4:00-5:20(16)  (A. Weinstein)

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. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.
Fall  HISPO100  S01  12041  MW 9:00-9:50 & TTh 9:00-10:20(01)
Fall  HISPO100  S02  12042  MW 10:00-10:50 & TTh 10:30-11:50(01)
Fall  HISPO100  S03  12043  MW 12:00-12:50 & TTh 10:30-11:50(01)
Fall  HISPO100  S04  12044  MW 11:00-11:50 & TTh 1:00-2:20(01)

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 daily life, health, art and culture, nature and the environment, and relationships) and write simple texts with good command of grammar and sentence structure. Ideal for students interested in fast-tracking their language learning to meet study abroad requirements. Double credit. Instructor permission required. Enrollment limited to 18: 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.
Fall  HISPO110  S01  15368  MTWThF 11:00-12:50(04)

0300 Intermediate Spanish I

0400 Advanced Spanish
Continuing Spanish. Recommended prerequisite: HISPO 0200.
Spr  HISPO400  S01  15869  TTh 11:00-12:20(11)

0500 Advanced Spanish II
Continuing Spanish. Recommended prerequisite: HISPO 0400.
 Fall  HISPO500  S01  15368  MTWThF 11:00-12:50(04)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
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. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.

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. Prerequisite: 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. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.

0400 Intermediate Spanish II

This course offers an exploration of the Spanish language and Hispanic cultures through a variety of thematic foci: the world of work, the arts, globalization and technology, leisure, and celebrations. It focuses on vocabulary building, the examination of some of the more difficult points of grammar, and moving students towards a more sophisticated level of comprehension and expression. Students work with readings, including literary texts; songs; film; and the visual arts. Prerequisite: HISP 0300 or placement: SAT II scores between 520 and 590 or Brown Placement Exam scores between 411 and 490. Students with an AP score of 3 or below must take the Brown Placement Exam. Students should check Placement and Course Description in the Undergraduate Program section of the Hispanic Studies Website. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.

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 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. If course is full, students should sign the wait list available in Rochambeau House, 84 Prospect St., Room 117 during the pre-registration period.

0600 Advanced Spanish II

Offers continued, advanced-level work in listening, speaking, reading, and writing skills, with focused review of challenging aspects of Spanish grammar. Course materials include films, music, art works, and a variety of written texts (articles, stories, plays, a novella, etc.) chosen to promote class discussion and in-depth written analysis. There will be individual and group activities, including in-class presentations and creative writing projects. Prerequisite: 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. 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. If course is full, students should sign the
118 / Hispanic Studies
wait list available in Rochambeau House, 84 Prospect St., Room 117
during the pre-registration period. Students with scores of 750 and
above on the SAT II, 551 on the Brown Placement Exam, or 5 in AP
Literature should consider offerings in the HISP 0730-0740-0750
range.

Fall HISP0600 S01 12101 MW 9:00-10:50(17) (B. Bauer)
Fall HISP0600 S02 12102 MW 12:00-1:50(17) (B. Bauer)
Fall HISP0600 S03 12103 TTh 9:00-10:50(17) (B. Bauer)
Fall HISP0600 S04 12104 TTh 11:00-12:50(17) (B. Bauer)
Fall HISP0600 S05 13222 TTh 12:00-1:50(17) (B. Bauer)
Spr HISP0600 S01 21509 MW 9:00-10:50(17) (B. Bauer)
Spr HISP0600 S02 21510 MW 12:00-1:50(17) (B. Bauer)
Spr HISP0600 S03 21511 TTh 9:00-10:50(17) (B. Bauer)
Spr HISP0600 S04 23301 TTh 11:00-12:50(17) (B. Bauer)
Spr HISP0600 S05 23302 TTh 12:00-1:50(17) (B. Bauer)
Spr HISP0600 S06 23672 MW 11:00-12:50(17) (B. Bauer)

0730 Early and Contemporary Writers of Spanish America
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 read and write 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 DVPS LILE

Fall HISP0730 S01 15369 MW 8:30-9:50(02)
Spr HISP0730 S01 21513 TTh 9:00-10:20(08)

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 12115 TTh 1:00-2:20(10) (M. Vaquero)
Spr HISP0740 S01 23642 TTh 10:30-11:50(09) (M. Vaquero)

0750 Topics in Hispanic Culture and Civilization
Addresses the interdisciplinary study of Hispanic cultures as
manifested in history, literature, and the arts, as well as in the every
day discourses of a culture (film, television, journalism). An ancillary
aim is to develop students' written and oral expression in Spanish.
Prerequisite: SAT II scores of over 750, 5 in AP Literature or 651 and
over in the Brown Placement Exam.

Spring HISP0750B S01 24348 MWF 1:00-1:50(06) (B. Bauer)

0750D Mexico, Image and Encounter
An exploration of portrayals of contemporary Mexican culture and
attitudes in the media, art and literature, and by means of an on-line
dialogue with Mexican university students. Special emphasis on
Mexico City and Tijuana and the perspectives of regional, foreign, and
social outsiders. Analysis of films, travel guides/accounts, and readings
by Monsiváis, Pacheco, Poniatowska, Swain, Villoro, etc. Enrollment
limited to 20 first year students. FYS

Fall HISP0750D S01 15370 MWF 11:00-11:50(04) (B. Bauer)

(For Undergraduates and Graduates)

1210 Studies in Spanish Literature of the Middle Ages

1210C History of the Spanish Language
Introduction to the genealogy and development of the Spanish
language. Includes the historical and cultural events that deeply
influenced the shaping of the language, the nature of Medieval
Spanish, and the development of the language beyond the Iberian
Peninsula, especially in the Americas. This course will make the
history of Spanish accessible to anyone with a knowledge of Spanish
and a readiness to grasp basic linguistic concepts. Prerequisites: HISP
0730 or HISP 0740.

Fall HISP1210C S01 17057 TTh 10:30-11:50(09) (M. Vaquero)

1240 Studies in Spanish Literature of the Golden Age

1240H Spanish Golden Age Stories
Carefully scrutinizes various narrative models of the Golden Age:
picarsque, Moorish, sentimental, and exemplary. Includes well-known
works (Lazarillo, Cervantes' Coloquio de los perros) as well as other
related writings. Emphasis on social, historical, and genre issues.
Prerequisites: HISP 0730 or HISP 0740.

Fall HISP1240H S01 17195 MWF 1:00-1:50(06)

1290 Literature of the Spanish Twentieth Century

1290K The Spanish Novel since 1975
In 1975, the death of General Francisco Franco opened the door to a
new democratic Spain. In the novel, the social and political novelties
generated a change both thematic and formal. This course pays
attention to issues such as the diverse genres that have gained
strength, such as the groups that have acquired a literary voice, and
the portrayal of current preoccupations.

Fall HISP1290K S01 17187 TTh 2:30-3:50(11)

1290R Novela y cine en la España democrática
A partir de la lectura y visionado de algunas novelas y películas
fundamentales se discutirá la imagen de la España democrática en la
 ficción literaria y cinematográfica. Enrollment limited to 20.

Spr HISP1290R S01 26962 TTh 2:30-3:50(11)

1330 Studies in Spanish American Literature

1330K Contemporary Poetry of Latin America
An exploration of some representative poets and movements in
modern Latin American poetry, with special emphasis on the Latin
American Modernists, the Avant-Garde and contemporary trends.
Topics include: analytical techniques, historicity, poetry and translation,
and a creative writing workshop. For advanced students only.
Prerequisites: HISP 0740, or HISP 0600 and HISP 0730. Previous
experience in 1000-level Spanish courses desirable.

Fall HISP1330K S01 16752 TTh 9:00-10:20(08) (A. Mazzucchelli)

1330P The Philosophy of Borges
Jorge Luis Borges devoted several essays during his youth to
developing his philosophical understanding of concepts like
"personality," "memory," "reality," "narrative" and "style." At some point
later in his literary career, he attempted to erase the memory of those
years from his public existence, to the extent that most of the books
published during the 1920s were never reprinted during Borges' lifetime.
Nevertheless, it was in those years that he developed the
entire philosophical grounding of his future literary work. We will work
to decipher Borges' philosophy through the reading and interpretation
of his essays, narratives and poems, including several key texts from
his first three suppressed prose volumes (Inquisiciones, El tamaño de mi
esperanza, and El idioma de los argentinos). In English, with some
Spanish readings.

For complete, up-to-date course information please see the Brown Course Search tool
(https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
Fall  HISP1330P  S01  16753  TTh 1:00-2:20(10)  (A. Mazzucchelli)

1370  Studies in Contemporary Spanish American Literature

1370K  Literatura latinoamericana del siglo XXI
Dedicated to recent authors and texts from the Hispanic world, this course will explore the new trends, debates, and ideas shaping fiction in Spanish. We will pay special attention to narratives of exploration and innovation, family sagas and national melodramas, migration and internationalization.
Spr  HISP1370K  S01  26483  TTh 10:30-11:50(09)  (J. Ortega)

1370L  Gabriel Garcia Marquez and the Politics of Magic Realism
Estudiamos las principales novelas del autor, desde El coronel no tiene quien le escriba hasta Cien años de soledad, con especial atención al realismo mágico y las ideas sobre la novela que cultivó el autor. Nuestra discusión se situará en el proceso social y político latinoamericano así como en las mitologías de la cultura popular.
Fall  HISP1370L  S01  16754  TTh 10:30-11:50(09)  (J. Ortega)

1700  Stylistics and Linguistics: El cuento en América Latina (Taller de Crítica)
Este curso está dedicado a estudiar el lenguaje literario y sus estilos en los relatos orales, leyendas y mitos, así como cuentos y microrelatos, de narradores fundamentales en este género: Quiroga, Borges, Rulfo, Cortázar, Areola, Monterroso, Ribeyro, Ampuero, y autores más recientes. El análisis será formal y metódico, y estudiaremos el funcionamiento del estilo y la lengua literaria para ejercitarnos en la creatividad del español.
Spr  HISP1700  S01  25167  T 3:00-5:20(16)  (J. Ortega)

1900  Capstone Course

1900L  Theories of Literature and Culture in a Hispanic Context
Introduces key contemporary perspectives in the fields of literary and cultural theories from a transatlantic perspective. Emphases will be on definition of literature, theories of the novel and of literary genres, theories of interpretation, Latin American and Spanish theoretic perspectives like hybridism, “transculturación” and the theory of Baroque, and a revision of modern approaches to culture (critical theory, ecology, gender theory, post-structuralism, etc.). Spanish and Latin American texts will be used as a counterpoint to theory. Offered for senior concentrators in the Spanish Studies department in their last semester. Readings by Carpentier, Nietzsche, Aristote, Derrida, Foucault, Deleuze, Simmel, Paz, Borges, Abram, Rama and others. Open to senior Hispanic studies concentrators.
Spr  HISP1900L  S01  26484  TTh 1:00-2:20(10)  (J. Ortega)

1990  Senior Conference
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
Fall; Spr

(Primarily for Graduates)

2030  Studies in Spanish Literature of the Middle Ages

2030C  Medieval Masterpieces
Examines three medieval Spanish masterpieces: Cantar de Mio Cid, Libro de buen amor, and Celestina. Other works are read to explore lines of continuity and discontinuity in these three works and their respective genres.
Spr  HISP2030C  S01  26800  M 3:00-5:20(13)  (M. Vaquero)

2160  Seminar in Spanish Literature of the Golden Age

2160C  Language, Honor and Society in Golden Age Theater
The canonical dramatic texts of the Spanish Golden Age—from Lope’s El caballero de Olmedo and El castigo sin venganza to Tirso’s El burlador de Sevilla and Calderón La vida es sueño—will be opened to new critical inquiry. The role of language in the dramatic text, the construction of characters’ social and moral discourses (justice vs. revenge, reality vs. dreams, courtly love vs. jealousy, chastity vs. incest) will be an issue. Each play will be studied in relation to the playwright’s worldview and as a metaphor of a decadent patriarchal society.
Fall  HISP2160C  S01  17188  Th 3:00-5:50(13)

2520  Seminar: Spanish American Literature

2520J  Teoría y practica del texto transatlántico
Este curso propone varios escenarios teóricos sobre el texto transatlántico. Partiendo de modelos de teoría literaria formal trabajaremos sobre un conjunto de textos de ambas orillas del idioma. Revisaremos las cuestiones del género, representación, lectura y recepción, mezcla y heterogeneidad archivo y cambio.
Fall  HISP2520J  S01  16755  W 3:00-5:20(14)  (J. Ortega)

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.
Spr  HISP2520L  S01  26485  F 3:00-5:20(15)  (S. Merrim)

2520M  The Poetry and Discursive Strategies of Spanish American Modernismo
The development of Modernismo was a turning point in the elaboration of the continental self-image. Modernista poets like Rubén Darío, Leopoldo Lugones, Julio Herrera y Reissig, Julián del Casal, Manuel Gutiérrez Nájera and José Asunción Silva were among the first original Hispanic American creators of literature, but they did not share a common view on continental problems and solutions. The relevance of Modernismo for the shaping of Latin American self image cannot be overstated. Modernista’s conceptions on new intellectuals, aestheticism, l’art pour l’art, racism, immigrants, science and the occult, modernization, decadence, dandysmo, the body, sex, feminism, anarchism, cosmopolitanism, pan-Latinism, universalism and nationalism will be discussed.
Spr  HISP2520M  S01  23217  W 3:00-5:20(14)  (A. Mazzucchelli)

2620  Special Topics in Hispanic Literature

2620F  Fases de la enemistad. García Lorca, Dali, Buñuel
Federico García Lorca, Salvador Dalí y Salvador Buñuel son tres de los artistas más singulares en la España del siglo XX. En este curso estudiaremos cómo literatura, pintura y cine se entremezclan en su práctica artística para conseguir una renovación del viejo Surrealismo francés y su posición respecto a la llamada “generación de 27”.
Fall  HISP2620F  S01  17189  M 3:00-4:50(13)

2900  Theory and Methods of Foreign Language Teaching
How are second languages acquired? How can instruction optimize acquisition? How do we evaluate, improve or create effective teaching materials? This course introduces the theory of foreign language learning and teaching and seeks to help language teachers implement communicative language teaching through reflective practice. Written permission required for undergraduates.
Spr  HISP2900  S01  21803  T 3:00-4:50(16)

2970  Preliminary Examination Preparation

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
120 / History
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  12343  "To Be Arranged"
Spr  HISP2970  S01  21597  "To Be Arranged"

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.
Fall; Spr

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  12346  "To Be Arranged"
Spr  HISP2990  S01  21598  "To Be Arranged"

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.
Fall; Spr

History

(Primarily for Undergraduates)

0020 Europe since the French Revolution
A survey of European history from the middle 18th century until recent times. The themes include the transformation of a traditional society, industrialism, revolutionary movements, ideological changes, imperialism, fascism, communism, and the present state of European civilization. M

Spr  HIST0020  S01  21301  TTh 1:00-2:20(10)  (J. Richards)

0410 Introduction to East Asian Civilization: China
This course is both an introduction to Chinese history from earliest times to present and an introduction to historical analysis. The course is open to all students without prerequisite and assumes no prior knowledge of the material. During the course we will examine the changing conception of empire in traditional China and how China became a nation-state in the modern period. We will focus on the interactions between the Chinese and their neighbors—especially the steppe nomads from the north and westerners from Inner Asia and Europe. This course also aims to help students to understand modern China by emphasizing the connections between the present and the past. Readings and weekly discussion sessions focus on the interpretation of primary sources (in translation) and the nature of historical evidence and argument. E

Fall  HIST0410  S01  11854  MWF 11:00-11:50(04)  (C. Brokaw)

0420 Introduction to East Asian Civilization: Japan
A broad-based survey that begins with the formation of a distinctive lifestyle in prehistoric times and continues through Japan's emergence to a modern nation today. Particular emphasis is placed on understanding the fundamental cultural values and aspirations of Japanese who lived in various historical periods and analyzing their attempts to create particular political, social, and economic systems that would give life to those dreams and ambitions. E

Spr  HIST0420  S01  21302  MWF 10:00-10:50(03)  (J. McClain)

0720 A Checkered Past: The United States and the "Third World," 1945-Present
An indelible post-9/11 image was that of international headlines proclaiming "We are All Americans Now." However, not everyone shared that sentiment, prompting many Americans to ask "why do they hate us?" Part of the answer lies in the history of U.S. policy. This course examines the history of the relationship between the United States and the regions of the world (Africa, Asia, Latin America, and the Middle East) that collectively came to be known as the "Third World." No prerequisites, although a basic knowledge of American history and an active interest in current affairs and international politics are suggested. M

Sum  HIST0720  S01  60289  MTWTh 9:00-11:00  (M. Sifuentez)

0750 Great Modern European Thinkers
This course will introduce you to the intellectual and cultural history of Europe from the late eighteenth century to the present. Through a broad study of ideological and artistic currents—including liberalism, romanticism, Marxism, surrealism, and fascism, and postmodernism—we will examine the changing attitudes of Europeans towards modern life. Enrollment limited to 20.

Sum  HIST0750  S01  60370  MTWTh 1:00-3:00  (J. Hagel)

0940B The Campus on Fire: American Colleges and Universities in the 1960's (EDUC 0400)
Interested students must register for EDUC 0400 S01 (CRN 10923).

0940C When Leaders Lie: Machiavelli in International Context (ITAL 0751)
Interested students must register for ITAL 0751 S01 (CRN 26870).

0970 First Year History Seminar
Designed for first-year students who wish to acquire historical skills and experience working together as an intellectual community. May serve as a gateway for more advanced courses. Enrollment limited to 20 first year students. FYS

0970J Slavery and Historical Memory in the United States
How has America chosen to remember and forget the enslavement of millions of its own people? What are appropriate ways to acknowledge slavery in monuments, museum exhibitions, film, literature, and public policy? By approaching these questions through a wide range of visual and textual sources, we will explore the indeterminate space between history and memory. Enrollment limited to 20 first year students. FYS

0970K The Measure of All Things
Interest in measurement is a peculiarly modern pre-occupation. This course will introduce you to the intellectual and cultural history of measurement from antiquity through today. Enrollment limited to 20 first year students. FYS

0970L The Holocaust in Historical Perspective
The course will examine the history and historiography of the Holocaust from early accounts to recent reconstructions of the origins, implementation, and aftermath of the "Final Solution." We will also analyze documents, testimonies, memoirs, trial records, and various forms of representations and commemorations of the Shoah. Enrollment limited to 20 first year students. FYS

0970R 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

0970S The Measure of All Things
Interest in measurement is a peculiarly modern pre-occupation. This seminar will look at intellectual, cultural, and historical forces that have shaped attempts to reduce the world to numbers from Newton to Einstein. Enrollment limited to 20 first year students. FYS

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcslsearch_public_P_Main).
0970X Gandhi's Way
This seminar will focus on the life and work of one of the most influential thinkers of the twentieth century, examining both his role in the Indian nationalist movement, as well as the global impact of his ideas on leaders such as Martin Luther King Jr. and Nelson Mandela. Enrollment limited to 20 first year students. FYS M

Fall HIST0970X S01 15480 M 3:00-5:20(13) (V. Zamindar)

0971E The U.S. and the Middle East: Image and Imperialism
The Middle East has figured prominently, in narrative and image, in the Western imagination. We will assess some of those narratives and images in their historical contexts, first tracing U.S. - Middle Eastern relations in the 19th and 20th centuries, then focusing our attention on representations of the Middle East in sources such as diplomatic reports, films, travel narratives, religious tracts, magazine advertising, and cartoons. Topics include the role of the press, the creation of the Middle Eastern "bad guy," imagining the "Oriental" female and male, imperial ethnographies, and visions of the "Holy Land." Enrollment limited to 20 first year students. FYS WRIT M

Fall HIST0971E S01 17074 T 4:00-6:20(13)

0980 Introductory Seminars in History
Integrates explicit discussions of historical methods, and serves as an introduction to the discipline and concentration. Enrollment limited to 20 freshmen and sophomores.

0980B Becoming French: Minorities and the Challenges of Integration in the French Republic
Recent controversies around Muslim integration, including debates around the headscarf and uprisings in the working class suburbs of large French cities, point to difficulties France has faced in integrating its minority populations. This course will explore the encounter between France and its immigrant, religious, and racial minorities from the Revolution to contemporary times. By comparing paths of integration and debates around minority inclusion, we will consider how minorities negotiated their identities as they struggled to internalize France’s cultural and historical legacy. We will also address political and historiographical debates over the relationship between political citizenship and religious/cultural identity. Enrollment limited to 20 sophomores; first year students may register with instructor permission. M

Spr HIST0980B S01 26793 W 3:00-5:20(14) (M. Mandel)

(For Undergraduates and Graduates)

1000 Ancient Greek History

1000A History of Greece: From Alexander the Great to the Roman Conquest
Covers the decline of Athens as the center of classical civilization; the conquests of Alexander the Great; the culture of the Greek elite and, to the extent that it’s recoverable, of the indigenous populations of the Hellenistic world; and Greek contributions to what we call Western Civilization. P

Fall HIST1000A S01 16931 TTh 1:00-2:20(10) (K. Sacks)

1000B The Shaping of the Classical World: Greeks, Jews, and Romans
Focuses on the ancient Greeks, Romans, and Jews, from 300 B.C.E. to 400 C.E. Covers primarily social, philosophical, and religious areas of contention and accommodation, ending with the late Antique, Christianity, and rabbinic Judaism. P

Spr HIST1000B S01 25246 TTh 10:30-11:50(09) (K. Sacks)

1020 Living Together: Muslims, Christians, and Jews in Medieval Iberia

While in most of medieval Europe Christians predominated numerically and culturally, in medieval Spain they were often overshadowed by people of the other two monotheistic faiths, Islam and Judaism. The course explores the diverse world of medieval Spain from the Visigothic prelude to the momentous events of 1492. Particular focus on the social, cultural, and political modes of interaction among Christians, Jews and Muslims. P WRIT

Fall HIST1020 S01 15481 TT 9:00-10:20(08) (A. Remensnyder)

1080 Slavery in the Ancient World
Examines the institution of slavery in the ancient world, from Mesopotamia and the Near East to the great slave societies of classical Greece and (especially) imperial Rome; comparison of ancient and modern slave systems; modern views of ancient slavery from Adam Smith to Hume to Marx to M.I. Finley. Readings in English. E

Spr HIST1080 S01 26824 TT 1:00-2:20(10) (J. Bodel)

1180 The Rise of the Scientific Worldview
Examination of the worldview that emerged in Europe during the scientific revolution, from 1543 when Copernicus and Vesalius published their works until Lavoisier’s chemical revolution in the late 18th century. Considers both the chronology of scientific developments, and their broader social and intellectual contexts. Accessible to science, humanities, and social science concentrators. P

Fall HIST1180 S01 16932 MWF 12:00-12:50(12) (J. Richards)

1420 Twentieth-Century Russia
Successive phases of the Soviet experience from the Russian Revolution of 1917 through the Gorbachev era. Topics include the Russian Revolution and the Civil War, Collectivization, the Purges, the Second World War, the Cold War, and the dissolution of the Soviet system. M

Spr HIST1420 S01 24125 TTh 10:30-11:50(09) (E. Pollock)

1430 Truth on Trial: Justice in Italy, 1400-1800
Law courts had a profound impact on Italian society and culture between the Renaissance and the Enlightenment. Law courts helped define what constituted deviance, legitimate knowledge, and individual rights. They did so in a long ago world in which it was possible to imagine that some gifted individuals could fly, that certain people were created superior to others, and that the sun revolved around the earth. From the persecution of heretics and witches, to the trial of Galileo and the increasing use of courts by women and other marginalized groups, the Italian legal arena mediated what was political, social, scientific, and religious truth. By the eighteenth century many judicial practices came under criticism, including the use of torture and the death penalty. How did reformers attempt to remake the legal regime and the society in which it was by then so intricately entangled? LILE P

Fall HIST1430 S01 16933 TTh 10:30-11:50(09) (C. Castiglione)

1440 Islamic History, 1400-1800
A survey of the major sociopolitical alignments of the central parts of the old world from 1400 to 1800. Particular attention given to the Ottoman, Safavi, and Mughal empires, which spanned much of these lands ca. 1500-1750. Concentrates on the socioeconomic and cultural environment within which the main institutions of these empires developed. P

Spr HIST1440 S01 26685 TT 2:30-3:50(11) (E. Akarlı)

1460 History of the Modern Middle East since 1918
A comparative survey of independence movements and the rise of modern states and societies in the Middle East since World War I. Problems of political organization, rapid socioeconomic development, and identity formation; causes and consequences of interstate conflicts; the impact of external powers’ involvement in the region (with an emphasis on American involvement and interests). M

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Fall HIST1460 S01 16934 MWF 2:00-2:50(07) (E. Akarllı)

1490 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. The course will introduce students to the major medical traditions of the Old World to about 1700, with an emphasis on Europe, and explore some of the reasons for change. A knowledge of languages and the social and natural sciences is welcome but not required. Not open to first year students. P

Fall HIST1490 S01 15497 MWF 10:00-10:50(03) (H. Cook)

1510 History of Modern China I:

1510A China's Late Empires
A post-nationalist perspective on history in China from 1200-1930, with emphasis on empire-formation, gender, and daily life in the Mongol Yuan, Chinese Ming, and Manchu Qing empires, as well as nationalist reconstructions of the Chinese past in the early twentieth century. P

Spr HIST1510A S01 26025 TTh 10:30-11:50(09) (C. Brokaw)

1530 Modern Korea: Contending with Modernity
This course examines the extraordinarily rapid revolution of Korea from isolated, agrarian society into a culturally modern, industrialized, and democratic nation that is an important actor on the world stage. It also will investigate how a non-Western society generates its own inspiration for human relations, social structure, political and cultural values. Includes coverage of North Korea. Instructor permission required. M

Fall HIST1530 S01 16935 MWF 9:00-9:50(02) (J. McClain)

1552 Co-Existence and Conflict: Polish-Jewish Relations From 1500 Until Today
Relations between Poles and Jews formed one of the bitterest national-religious conflicts in twentieth-century Eastern Europe. Like all such conflicts, however, it did not simply happen; nor were relations uniformly hostile. In this course we examine the roots of the conflict, stretching back centuries, and the ways in which peaceful co-existence between Poles and Jews could breed hostility and violence. Topics include: Jews and the early-modern nobility; the nineteenth-century “Polish-Jewish Brotherhood”; the exclusionary politics of the interwar Polish republic; Poland’s role in the Holocaust; the post-war Communist regime and the Jews; Polish-Jewish relations following the collapse of communism. E

Spr HIST1552 S01 26695 MWF 12:00-12:50(05) (A. Teller)

1570 Japan's Pacific War: 1937-1945
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 concern falls into the areas of mutual images, mobilization, and memory. M

Fall HIST1570 S01 16936 MWF 1:00-1:50(06) (K. Smith)

1580 Empire and Resistance: The Making of Modern South Asia
This course will examine the making of modern South Asia, from the decline of Mughal rule and the emergence of Company Raj, up to present. The course will particularly focus on colonialism and nationalism, the relationship between the colonial state and post-colonial nation-states of South Asia, to understand concepts of empire, resistance and ‘postcoloniality’. M

Fall HIST1580 S01 14203 TTh 10:30-11:50(09) (V. Zamindar)

1630 Modern Latin America I
This course offers an introduction to the history of Latin America, beginning with the late colonial period and running through the close of the twentieth century. Emphasis is placed on political, social, and cultural history; less attention is paid to diplomatic and economic history. M

Spr HIST1630 S01 23470 TTh 2:30-3:50(11) (J. Green)

1640 Clash of Empires in Latin America
Examines Latin America as the scene of international rivalry from the 16th to the 19th century. Topics include comparative colonization, the transatlantic slave trade, privateering and piracy in the Caribbean, and the creation of an "Atlantic world." P

Fall HIST1640 S01 16937 MWF 10:00-10:50(03) (R. Cope)

1641 The Age of Revolutions in the Atlantic World, 1760-1824
In the middle of the eighteenth century, the Americas were a foreign subsidiary of a handful of western European monarchies; not long into the nineteenth century, most of North and South America was composed of independent republics. What happened in the meantime? Often considered separately, the revolutions in British North America, Peru, France, Saint-Domingue (Haiti) and Spanish America had diverse local circumstances but also composed a single narrative of intellectual ferment, imperial reform and over-reach, accelerating violence and, ultimately, the forging of new political communities. It was a process that helped create the modern world. E

Fall HIST1641 S01 17049 TTh 9:00-10:20(08) (J. Mumford)

1670 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. E

Fall HIST1670 S01 11938 TTh 2:30-3:50(11) (J. Green)

1730 Antebellum America and the Road to Civil War
Surveys society, culture, and politics between 1800 and 1860. Topics include the social order of slavery, the market revolution and its impact, abolition and other evangelical reform movements, and the development of sectional identities. M

Spr HIST1730 S01 26686 MWF 10:00-10:50(03) (S. Rockman)

1740 Civil War and Reconstruction
Examines the origins of the Civil War, the war itself, and the period of Reconstruction. Analyzes the transformation of society, politics, and culture during this period, with special emphasis on slavery and emancipation, the revolutionary nature of the war, and the meanings and legacies of reunion. Not a course on military history. M WRIT

Spr HIST1740 S01 24129 MWF 1:00-1:50(06) (M. Vorenberg)

1760 Political Movements in Twentieth-Century America
Political movements in the United States in the twentieth century. History and theory. Highlights of the course include: populism, progressivism, segregationism, first wave feminism, labor movement, civil rights, new left, second wave feminism, new right. The course focuses on the origins, nature, ideologies, and outcomes of major political movements on both left and right in the twentieth century United States. M

Fall HIST1760 S01 16938 TTh 2:30-3:50(11) (R. Self)

1780 Modernizing America
The arrival of the modern age as recorded in novels, popular history, memoirs, and social and political commentary. We will explore American culture from the "Gilded Age" through World War II. M

Spr  HIST1780  S01  26953  MWF 2:00-2:50(07)  (E. Gorn)

1800 History of Religion in America, 1600-1865
This course considers the major people, events, and issues in the history of religion in North America, from pre-Columbian Native cosmologies to the tumultuous events of the Civil War. Attention will be given to "religion as lived" by ordinary people, as well as to the ways that "religion" shaped (or not) larger cultural issues such as immigration, public policy, social reform, warfare, democracy, slavery, and women's rights. Advanced undergraduate and graduate students interested in religion and American history will find this course useful. Prior exposure to American history is helpful but not required; there are no formal prerequisites. E
Fall  HIST1800  S01  16939  TTh 2:30-3:50(11)  (L. Fisher)

1801 Religion, Politics, and Culture in America, 1600 - Present
Religion has played an undeniable role in the contemporary American cultural landscape, including responses to 9/11, the era of George W., the rise of the Tea Party, and public and private discourse about moral and social issues like immigration, healthcare, stem cell research, and abortion. This course lends some perspective on the present by investigating the various and, at times, surprising role religion has played in history in the shaping of American culture. Although the course covers the entire span of American history, the topics are weighted toward the present. Prior knowledge of American history is helpful but not required. E
Sum  HIST1801  S01  60373  MWF 9:00-11:40  (L. Fisher)

1820 American Urban History to 1870
Both a survey covering urbanization in America from colonial times to the present, and a specialized focus exploring American history from an urban frame of reference. Examines the premodern, "walking" city from 1600-1870. Includes such topics as cities in the Revolution and Civil War, the development of urban services, westward expansion, and social structure. E
Fall  HIST1820  S01  15486  MWF 9:00-9:50(02)  (H. Chudacoff)

1840 Capitalism, Slavery and the Economy of Early America
The simultaneous expansion of capitalism and slavery witnessed intense struggle over the boundaries of the market, self-interest, and economic justice. This course traces those arguments from Colonization through Reconstruction and asks how common people navigate the shifting terrain of economic life. The approach is one of cultural and social history, rather than the application of economic models to the past. E
Fall  HIST1840  S01  16940  TTh 1:00-2:20(10)  (S. Rockman)

1850 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. M
Fall  HIST1850  S01  16941  MWF 12:00-12:50(12)  (M. Vorenberg)

1900 American Empire Since 1890
This survey of twentieth-century US foreign relations will focus on the interplay between the rise of the United States as a superpower and American culture and society. Topics include: ideology and U.S. foreign policy, imperialism and American political culture, U.S. social movements and international affairs, and the relationship between U.S. power abroad and domestic race, gender and class arrangements. M
Spr  HIST1900  S01  23472  MWF 11:00-11:50(04)  (N. Shibusawa)

1930A History of American School Reform (EDUC 1200)
Interested students must register for EDUC 1200 S01 (CRN 23663).

1930C The Century of Immigration (AMCV 1611Z)
Interested students must register for AMCV 1611Z S01 (CRN 24736).

1930D Making America: Twentieth-Century U.S. Immigrant/Ethnic Literature (AMCV 1611A)
Interested students must register for AMCV 1611A S01 (CRN 14860).

1950 Portuguese Navigations and Encounters with Civilizations

1950E Europe and the Indian Ocean, 1500 - 1800
This course aims to characterize the Indian Ocean in the early modern period and examine the complex relationship between this lively world and a variety of European players. The classical topics related to the economic history of maritime Asia and how the trading world of the Indian Ocean was impacted by different Wester powers (the Portuguese Estado da India, the European commercial companies) will be addressed. However, the course will focus on a set of relevant social and cultural phenomena, ranging from the interaction between European and Asian political, religious, scientific and artistic structures to the indigenization of individuals, groups and "micro-societies," or the formation and circulation of mutual ethnographical images. P
Fall  HIST1950E  S01  12272  MWF 1:00-1:50(06)

1950F From Morocco to China:Frontier Societies, Cultural Brokers, Multiple Identities in Portuguese Empire
This course focuses on the study of social and cultural forms of hybridism within the Portuguese early modern empire. By exploring the interaction between Portuguese soldiers, merchants and missionaries and a variety of litoral societies stretching from Morocco and West Africa to Brazil and Asia, the course will discuss both profile and role of these go-betweens and cultural brokers that easily moved between distinct cultural worlds. The creation and development of multiple social, ethnic and "national" identities is also under consideration. P
Spr  HIST1950F  S01  21576  MWF 2:00-2:50(07)

1965 Social Change in the 1960s
The 1960s continue to resonate in today's culture as the decade left an indelible imprint on the present society. This course focuses on the tumultuous decade and incorporates the following topics: the Civil Rights Movement, race and ethnicity, the Women's Movement, the Peace movement, student movements, Vietnam War and foreign policy, sexuality, and cultural productions (music, film, art, photography). Lectures are rooted in historical narratives, but engage with interdisciplinary methodologies. In this way, as the semester unfolds we witness the complexity, the intertwining of movements and issues, and the evolution of cultural and political ideas and policy. First-year students require instructor permission. M
Fall  HIST1965  S01  16942  MWF 11:00-11:50(04)  (F. Hamlin)

1970 Undergraduate Capstone Seminars on Interpretrations of History
Enrollment limited to 20. Qualified undergraduates with the consent of individual instructors, may register for 2000-level graduate seminars.

1970S Perceptions of the Other and Ethnographical Writing in Early Modern Portugal
Pending Approval. No description available. Enrollment limited to 20. M
Fall  HIST1970S  S01  15487  F 3:00-5:20(15)

1971N Dissolution of the Ottoman Empire
This seminar focuses on external and internal developments that contributed to the gradual dissolution of the multi-religious and multi-ethnic Ottoman Empire into lands (a) that became dependently incorporated into the capitalist modern world order, and (b) where

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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religious and ethnic-linguistic distinctions became the founding principle of solidarity and political organization. We examine critically the context, advantages and shortcomings of different historical approaches to these developments. Since these approaches are shared by historians who work on other parts of the modern world, historians working these approaches characterize the coverage of modern history as are students who should be able to gain from this seminar a better understanding of the historiography of not only the dissolution of the Ottoman Empire but also of the broader issues of the historiography of the modern era.

Requirements: students must meet the following conditions for registration:

(1) Background knowledge of Middle East history and cultures. Students must have taken at least one survey course taught by Akarli, or courses focusing on the Middle East taught through Religious Studies, Comparative Literature, Political Science, and Anthropology.

(2) A senior or junior student status

(3) Concentration in one of the following fields: History, Middle East Studies, International Studies, Comparative Literature, Religious Studies, or Development Studies.

(4) Instructor's written permission will be required when the conditions above do not apply. Enrollment limited to 20. M

Fall HIST1971N S01 16943 Th 4:00-6:20(13) (E. Akarli)

1971P Identity Conflicts in Mid East History, 1900- Present: A Proseminar thru Memoirs, Novels, and Films

A critical study of selected memoirs, novels, and films (in English translation) as mirrors of identity conflicts and problems in Middle Eastern history since 1900. How competing political agendas and ideologies, differences in social background, gender and education, and changing conditions help shape, reshape, and blur collective as well as individual identities. M

Students must meet the following conditions for registration in this seminar:

(1) Background knowledge of Middle East history and cultures. Students must have taken at least one survey course taught by Akarli, or courses focusing on the Middle East taught through Religious Studies, Comparative Literature, Political Science, and Anthropology departments.

(2) A senior or junior student status

(3) Concentration in one of the following fields: History, Middle East Studies, International Studies, Comparative Literature, Religious Studies, or Development Studies.

(4) Instructor's written permission will be required when the conditions above do not apply. Enrollment limited to 20.

Spr HIST1971P S01 26687 W 5:30-7:50(18) (E. Akarli)

1972H Sex, Power, and God: A Medieval Perspective

Cross-dressing knights, virgin saints, homophbic priests, and mystics who speak in the language of erotic desire are but some of the medieval people considered in this seminar. This course examines how conceptions of sin, sanctity, and sexuality in the High Middle Ages intersected with structures of power in this period. While the seminar primarily focuses on Christian culture, it also considers Muslim and Jewish experience. Enrollment limited to 20. P

Fall HIST1972H S01 16944 T 1:00-3:20(10) (A. Remensnyder)

1972J Science in Darwin's England

This class will examine the interactions between the development of powerful new understanding of the natural world and the enormous social, cultural and intellectual changes that marked England in the Victorian Era. Enrollment limited to 20. M

Spr HIST1972J S01 26688 M 3:00-5:20(13) (J. Richards)


This course will focus on the political, social, economic, and cultural changes that took place in Brazil during the military dictatorship that ruled the country from 1964-85. We will examine why the generals took power, the role of the U.S. government in backing the new regime, cultural transformations during this period, and the process that led to re-democratization. Enrollment limited to 20. M

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).

1973J Korea: North and South

This course offers a systematic investigation of the political, economic, and social histories of Korea, North and South, from the inception of the two governments following liberation from Japanese occupation in 1945 to the present day. Enrollment limited to 20. Instructor permission required. M

Spr HIST1973J S01 26690 T 9:30-11:50(09) (J. McClain)

1973M Outside the Mainstream

When ratifying the UN Covenant on Civil Rights in 1979, its representative reported, "The right of anyone to enjoy his own culture... is guaranteed under Japanese law. However, minorities... do not end in Japan." Nothing could have been further from the truth. Japan is - and for a long time, has been - home to immigrants, indigenous populations forced to accept Japanese citizenship, outcast communities of Japanese ethnicity, and otherwise ordinary persons who live outside the mainstream as outlaws and prostitutes. This course examines how these minority communities came into existence and struggled to maintain distinctive lifestyles in what many view as an extraordinarily homogenous society. Enrollment limited to 20 students. Instructor permission required. M

Fall HIST1973M S01 16945 T 9:30-11:50(09) (J. McClain)

1973Q Stalinism

In this course students will examine in detail one of the most deadly and perplexing phenomena of the twentieth century: Stalinism. Readings will introduce students to major events of Soviet history from the mid-1920s to the mid-1950s as well as debates among historians about how to interpret those events? M

Fall HIST1973Q S01 16946 W 3:00-5:20(14) (E. Pollock)

1973U World of Walden Pond: Transcendentalism as a Social and Intellectual Movement

This course examines the 19th century phenomenon of Transcendentalism: this country's most romanticized religious, philosophical, and literary movement. Focusing especially on Emerson, Thoreau, and Fuller, we'll examine the ideas of the Transcendentalists in the age of reform and evaluate the application of their principles to abolition, feminism, and nature. The central problem which they wrestled with will be the focus, too, of our investigations: the tension between individualism and conformity. M

Fall HIST1973U S01 16947 Th 4:00-6:20(13) (K. Sacks)

1973Y Children and Childhood in America, 1640-Present

This course explores the history of children in America from 1640 to the present. It is organized chronologically, but is also topical in approach. Fundamental questions posed by historians in this burgeoning field will be examined: How has the regard for children changed over time? What is the role of children in the popular imagination? How has children's work evolved? How does gender affect children's development? We will consider answers to these questions through the historiography and primary sources that inform our knowledge of the past as children experienced it. Senior history concentrators will receive priority in enrollment. Instructor permission required. WRIT

Spr HIST1973Y S01 24702 MW 9:00-10:20(02) (S. Lassonde)

1974A The Mexican Revolution

We will cover Mexican history from the Liberal reforms of Benito Juarez in mid-19th to the long dictatorship of Porfirio Diaz which set up the Mexican Revolution of 1917, and conclude with an examination of the impact of the revolution on 20th century Mexico, including the large-scale movement of people and capital across the U.S.-Mexican border. M
Fall HIST1974A S01 16948 M 3:00-5:20(13) (E. Hu-Dehart)

1974B The Old South and Slavery
Focuses on the “Old South” of the United States-the period of southern history between the American Revolution and the end of the Civil War. Special attention given to slavery and race, honor and violence, class and gender relations, and political culture. Readings include historical monographs, memoirs, and novels. Not open to first year students. Instructor permission required. M

Spr HIST1974B S01 26691 M 3:00-5:20(13) (M. Vorenberg)

1975W History and Democracy in the Middle East
Examines the complex history of democracy in the Middle East through a synergistic approach - reading democracy through the lens of the Middle East and understanding the Middle East through the lens of democracy. For decades, U.S. politicians, the press, think tank pundits, and academicians have debated the feasibility of establishing democracy in the region. Few, however, have examined a longstanding history of democracy in the Middle East - one that reveals the complex underpinnings of democracy itself. We will examine the discursive debate on democratization in the Middle East and then match keywords with historical case studies in Iran, Egypt, Yemen, Turkey, Afghanistan, and Muslim Europe. Enrollment limited to 20 students. Not open to first year students. M

Fall HIST1975W S01 17073 T 4:00-6:20(13) (S. Balaghi)

1976R Early Modern Globalization: Jewish Economic Activity, 1500-1800
What can the experience of a minority group like the Jews teach us about the roots of globalization? What were the economic, political, and cultural conditions that allowed early modern Jewish merchants to create economic networks stretching from India to the New World? We will answer these questions by examining the connections and interactions between four major Jewish centers: Ottoman Jewry in the Eastern Mediterranean, the Port Jews of Amsterdam and London, Polish-Jewish estate managers in Ukraine, and the Court Jews of central Europe. We will see how European expansion exploited - and was exploited by - these Jewish entrepreneurs. Enrollment limited to 20 undergraduates. P

Fall HIST1976R S01 16954 TTh 10:30-11:50(09) (A. Teller)

1976T History of the Andes from the Inca Empire 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. E

Fall HIST1976T S01 17190 ’To Be Arranged’ (J. Mumford)

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.
Fall; Spr

1992 History Honors Workshop for Prospective Thesis Writers
HIST 1992 and HIST 1993 students meet together as the History Honors Workshop, offered in two separate sections per week. Prospective honors students are encouraged to enroll in HIST 1992 during semesters 5 or 6. HIST 1992 offers a consideration of historical methodology and the techniques of writing and research with the goal of preparing to write a senior thesis in history. This course allows students to 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. See History Honors in the section on Undergraduate Concentration Programs. WRIT

Fall HIST1992 S01 13714 W 3:00-5:20 (R. Cope)
Spr HIST1992 S01 26826 W 3:00-5:20(14) (R. Cope)
Spr HIST1992 S02 26827 Th 4:00-6:20(16) (R. Cope)

1993 History Honors Workshop for Thesis Writers, Part I
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, and writing a history honors thesis. Presentation of work and critique of peers’ work are required. Limited to seniors and juniors who have been admitted to the History Honors Program. HIST 1993 is a mandatory S/NC course. For more information, see the History Concentration Honors Requirements. WRIT

Fall HIST1993 S01 13118 W 3:00-5:20 (R. Cope)
Spr HIST1993 S01 25260 W 3:00-5:20 (R. Cope)
Spr HIST1993 S02 26828 Th 4:00-6:20(16) (R. Cope)

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 17075 ’To Be Arranged’ (R. Cope)
Spr HIST1994 S01 26296 ’To Be Arranged’ (R. Cope)

(Primarily for Graduates)

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 11939 ’To Be Arranged’
Spr HIST2890 S01 21382 ’To Be Arranged’

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.
Fall; Spr

2930 Colloquium
Required of all first-year graduate students; includes participation in Thursday Lecture Series. E

Fall HIST2930 S01 15490 W 3:00-5:20(14) (C. Brokaw)

2940 Graduate Workshop: The Practice of History
Required of all incoming Ph.D. students. E

Fall HIST2940 S01 16949 M 5:30-7:50(18) (R. Self)

2950 Professionalization Seminar
Required of all second year Ph.D. students; includes participation in Thursday Lecture Series. E

Spr HIST2950 S01 25289 Th 1:00-3:20(10) (K. Smith)

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

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
of a prospectus, and developing research grant proposals based on the prospectus. E

Spr HIST2960 S01 21384 M 5:30-7:50(18) (E. Gorn)

2970 Graduate Reading Seminars on Interpretations of History

2970C Rethinking the Civil Rights Movement
This graduate course encourages a rethinking of the complex components, arguments and activities that have characterized what we have come to know as the Civil Rights Movement, concentrating primarily on African American agency, actions and politics, through careful reading of recent scholarship in the field. While knowledge of U.S. history is preferred, this course asks larger thematic questions about protest movements (the role of the state, relationships with and between oppressed groups and organizations, and periodization), that will interest non-Americanists also. Some of the topics covered include: gender, organizing and strategies, the local, global ramifications and interactions, organizational structures and politics, and the recent concept of the Long Civil Rights Movement. M

Spr HIST2970C S01 26693 M 3:00-5:20(13) (F. Hamlin)

2970E Early Modern Continental Europe - Reading

Fall HIST2970E S01 16950 Th 1:00-3:20(10) (H. Cook)

2970Q Core Readings in 20th Century United States History
Major topics and themes in 20th-century U.S. history. M

Spr HIST2970Q S01 25290 F 3:00-5:20(15) (N. Shibusawa)

2970W Graduate Readings in Early American History

Fall HIST2970W S01 16951 Th 4:00-6:20(13) (L. Fisher)

2971B Topics in Twentieth Century Europe
This course will introduce graduate students to current scholarship on major issues in twentieth century European history. Topics will include (but are not limited to) the causes and consequences of the two world wars; the emergence, workings, and collapse of authoritarian societies; the spread of mass culture and consumerism; Americanization; de-colonization; the European Union, and the collapse of the bi-polar political system. In the interest of introducing students to the significant historiographical debates of the field, they will read both standard historical interpretations and newer scholarship. M

Fall HIST2971B S01 16952 W 9:00-11:20(02) (M. Mandel)

2971D Passion, Dispassion, and the Scholar
What role should passion and the imagination play in intellectual endeavor? Is the dispassionate, objective, and objectifying voice the only appropriate one in the arena of scholarship? How much can or should the scholar let his or her personality and personal investment in a subject appear on the page? The seminar will explore these and related questions by examining non-traditional modes of scholarly writing (primarily but not exclusively drawing on historians and anthropologists). This is not a seminar about theory and method, although such issues will inevitably be part of our discussions. It is a seminar about writing and scholarly voice. P

Spr HIST2971D S01 26694 T 12:00-2:20(10) (A. Remensnyder)

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. M

Fall HIST2971E S01 16953 T 5:30-7:50(12) (J. Green)

2971N Critical Perspectives on Public and Private
No description available. Open to graduate students only.

Spr HIST2971N S01 25303 Th 4:00-6:20 (E. Pollock)

2980 Graduate Research Seminars on Interpretations of History

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.

Spr HIST2980W S01 26934 T 6:00-8:20 PM(12) (O. Bartov)

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 11942 "To Be Arranged"
Spr HIST2990 S01 21385 "To Be Arranged"

History of Art and Architecture

(Primarily for Undergraduates)

0010 Introduction to the History of Art and Architecture
Introduction to the history of western art and material culture from the beginning to the present. In addition to examining visual strategies of representation, the course explores the varied ways in which art reflects and shapes social, religious, and political concerns. Weekly one-hour conference required. A

Fall HIAA0010 S01 15555 MWF 12:00-12:50(12) (R. Molholt)

0070 Introduction to American Art: The 19th Century
This undergraduate seminar traces the rise of American painting in the period from the Revolution to the dawn of modernism in the 20th century. Major figures, such as Thomas Cole, Frederick Church, Winslow Homer and Albert Pinkham Ryder, will be examined, as will significant movements, such as the Hudson River School and Tonalism. Discussion will help place American art within the context of history, the invention of national identity, and parallel developments in popular visual culture. Enrollment limited to 100.

Fall HIAA0070 S01 17048 MWF 2:00-2:50(07) (D. Nickel)

0110 Ancient China: Art and Archaeology
An introduction to Chinese art and culture, focusing on recently excavated evidence of material culture from the Stone Age through the Han Dynasty. Students will learn to use the materials and methods of archaeology, art history, and the history of technology, as well as readings in history, literature, and philosophy to interpret excavated materials. Field trip pending museum schedules. Weekly one-hour conference required.

Fall HIAA0110 S01 16864 MWF 10:00-10:50(03) (R. Bickford)

0130C Archaeologies of the Greek Past (ARCH 0420)
Interested students must register for ARCH 0420 S01 (CRN 15790).
0130E The World of Byzantium (CLAS 0660)
Interested students must register for CLAS 0660 S01 (CRN 15953).

0150 Visual Culture of the Hispanic World, 1500-1800
Surveys the visual culture(s) in the viceregalities of New Spain and Peru over a 300-year period from the reign of the Catholic kings in the 15th century to the beginnings of independence at the end of the 18th century. A

Fall HIAA0150 S01  16865  TTh 1:00-2:20(10)  (C. Zerner)

0210 Chinese Painting during the Song Dynasty
Song Dynasty (960-1279) paintings literally are the stuff of which dreams of China were made - in their own time, in traditional China, and in modern scholarship. Song painters visualized an orderly cosmos as monumental landscape scrolls, captured poetic moments in painted fans that were the size of dinner plates, claimed their place in the Great Tradition through antique styles, and advertised signs of Heaven's approval through images of rare birds and flowers, bustling cities, and fat baby boys. Meanwhile, literati painters presented themselves and their virtues as ink-paintings of pine, bamboo, plum. Our work in this course, through lectures, discussions, and papers, is to investigate these idealized images and to reconnect Song paintings to the world in which they were active agents of the changes that made Song culture, politics, and society. Field trip pending.

Spring HIAA0210 S01  26624  TTh 10:30-11:50(09)  (R. Bickford)

0320 Roman Art and Architecture: Spectacles and Entertainment
Spectacles offered the Romans innumerable opportunities for self-definition, on the individual level, the community level, and even the imperial level. Performance art cuts across traditional boundaries between media, and we will examine total ensembles as often as possible. Topics will include the amphitheater and the circus, representations of gladiators and chariohters, the architecture of propaganda and theater, and the triumph of victorious individuals as well as its opposite, the literal defacement of imperial portraits. Domestic spectacles will also be considered, including pleasure boats and vacation homes, dining rooms, gardens and sculpture collections.

Spring HIAA0320 S01  26625  TTh 1:00-2:20(10)  (R. Molholt)

0500 From Van Eyck to Bruegel
Artists of Flanders and Holland effected a revolution in the techniques and subjects of painting during the 15th and 16th centuries. This course explores the roots of artistic change in religion, urban history, politics, Italian humanism, economics, and craft traditions. The focus is on the great works of such artists as Jan van Eyck, Hieronymus Bosch, and Pieter Bruegel the Elder.

Spring HIAA0500 S01  26626  MWF 11:00-11:50(04)  (J. Muller)

0550 Florence and Tuscany in the Fifteenth Century
Examines the paintings, sculpture, graphic art, and architecture of Tuscany in the 15th century, primarily in Florence but also venturing into Siena, Arezzo, Borgo San Sepolcro. Using Renaissance critical terms and analytical tools, we take into account the technical and commercial habits of craftspeople, the economy of the cities and towns, and the forms and functions of art in domestic, civic, and religious spheres. Weekly one-hour conference required.

Fall HIAA0550 S01  16866  TTh 2:30-3:50(11)  (E. Lincoln)

0560 The Visual Culture of Early Modern 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. A WRIT

Spring HIAA0560 S01  26627  TTh 2:30-3:50(11)  (E. Lincoln)

0600 Baroque
The course surveys the visual culture of Rome from 1564-1700. During that time Rome became the center of artistic change in Europe, the seat of the Counter-Reformation Catholic Church, and the dominant source of classical learning. All media that participated in these historical developments are included: from papal urban plans to Bernini's fountains and Caravaggio's paintings.

Fall HIAA0600 S01  16867  TTh 10:30-11:50(09)  (J. Muller)

0650 Eighteenth-Century Art-Imagining the Global Eighteenth-Century
Forging a modern state and a modern empire involved new and reworked forms of visual representation. This course looks at how artists in the two leading imperial Western powers, England and France, produced art that addressed the concerns of diverse and newly expanded audiences.

Spring HIAA0650 S01  26628  TTh 10:30-11:50(09)  (K. Kriz)

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  15558  MW 1:00-1:50(06)  (D. Neumann)

0860 Contemporary Architecture
Stylistic, technological, and theoretical developments in architecture from the 1960s to the present. Analyzes movements such as "Brutalism," "Postmodernism," and "Deconstruction" and works by architects such as Frank Gehry, I. M. Pei, and Zaha Hadid. Emphasizes the complex conditions of architectural production in different parts of the world. Complements HA 85, but may be taken independently. A

Spring HIAA0860 S01  25367  MW 12:00-12:50(05)  (D. Neumann)

0880 Contemporary Art I
This course offers a comprehensive panorama (while inevitably not an all-inclusive one) of the arts from the last sixty years. It covers the major trends and a selection of significant individuals from the post-war period to the most recent developments; following a chronological timeline that leads from abstract-expressionism, minimal art, pop art, performances, happenings, to the various "post" critical attitudes (post-painterly, post-modern).

Fall HIAA0880 S01  11638  TTh 9:00-10:20(08)  (H. Vanel)

0890 Contemporary Art II
This class considers the historical persistence of the dream of a realization of art in life from its romantic formulation to its recent incarnations in the contemporary era with an emphasis on the early 20th century avant-gardes, the utopian tendencies of the 20's and 30's, the effects of cybernetic in the 50's and the development of environmental art forms since the 60s. A

Spring HIAA0890 S01  21253  TTh 9:00-10:20(08)  (H. Vanel)

(For Undergraduates and Graduates)

1040 Topics in East Asian Art
Written permission required. Enrollment limited to 15.

1040H The Shape of Good Fortune
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Auspicious images constitute the longest, richest traditions in the history of Chinese visual culture. New Year’s celebrations present images that cross class, education, and time, as they embody shared hopes for longevity, progeny, and wealth. Students shall create a Chinese New Years exhibition—selecting objects and preparing texts that explain their history, meanings, and function to make them accessible to others. Topics include: popular prints, door guardians, Demon Queller, lucky couplets, and visual puns. Previous courses in Chinese art or East Asian studies recommended. Field trips pending museum schedules. Enrollment limited to 15. Instructor permission required.

Fall HIAA1040H S01 16868 W 3:00-5:20(14)  (R. Bickford)

1200 Topics in Classical Art and Architecture
Enrollment limited to 20.

1200D Pompeii
Pompeii and its neighboring towns are the best examples for studying the life, art, and architecture of a Roman town. This seminar covers the works of art and the life in the town as reflected in the monuments excavated over the past 250 years. Enrollment limited to 20.

Fall HIAA1200D S01 16869 Th 4:00-6:20(13)  (R. Molholt)

1300I The Art of Curating (MCM 1700R)
Interested students must register for MCM 1700R S01 (CRN 24029).

1300N Visual Cultures of the Afro-Americans (AFRI 1180)
Interested students must register for AFRI 1180 S01 (CRN 16147).

1300P Architecture and Memory (ARCH 1710)
Interested students must register for ARCH 1710 S01 (CRN 16913).

1550 Topics in the Early History of Printmaking

1550B Topics in the Early History of Printmaking: Festival and Carnival
This course looks at the printed festival books made for recording ideal versions of royal entries, funerals, weddings and other printed expressions of regal celebration, alongside printed, painted and otherwise recorded evidence of popular celebrations such as carnival, and civic and religious festivals such as the Sieneese palio. Although beginning with circulated prints and books, we will also look at the material culture of these events in their widest sense to investigate the advertisement and control of festival cultures. The class will focus on early modern Italy but students are welcome to broaden our geographic horizons. Enrollment limited to 20.

Spr HIAA1550B S01 26914 M 3:00-5:20(13)  (E. Lincoln)

1750 Topics in Early Nineteenth-Century Art
Enrollment limited to 20.

1750B Images and the Making of London in the Nineteenth Century
This course will examine the way in which London was "produced" as a modern city by various forms of visual imagery (printed and painted), including maps, panoramas, and caricatures. Enrollment limited to 20.

Fall HIAA1750B S01 16873 M 3:00-5:20(13)  (K. Kriz)

1890 Topics in Contemporary Art
Enrollment limited to 20.

1890A Art of Participation: Promises of Performance, Happening and Installation of Arts from the 50s to 70s
Contemporary artists (and, eventually, institutions) frequently require the active participation of the public. In order to avoid a passive acceptance of this pervasive trend, this undergraduate seminar intends to question the historical and theoretical foundations of the participation notion through the development of the arts of performance, happening and installation. First situating historically this tendency in the first avant-garde, the seminar intends to interrogate the promise of an individual or collective liberation underlying the "arts of participation". Enrollment limited to 20.

Spr HIAA1890A S01 26795 M 3:00-5:20(13)  (H. Vanel)

1890G Contemporary Art of Africa and the Diaspora
Will explore the art of contemporary Africa and its diaspora with an eye towards understanding the political and economic context in which it is produced and consumed. Our approach will be interdisciplinary, putting key theoretical texts from anthropology on the political economy of Africa in dialog with the works of contemporary artists. However, the intent here is not to reduce creativity to an economic activity alone, though we will be addressing the topic of art markets. Rather, we will explore artistic practices that surmount "the tyranny of the 'already,'" as Malian writers Konate and Savane have eloquently said. Enrollment limited to 20 juniors, seniors, and graduate students.

Spr HIAA1890G S01 26227 T 4:00-6:20(16)  (K. Smith)

1910 Project Seminar for Architectural Studies Concentrators
Enrollment limited to 20.

1910A Architecture of Downtown Providence from Late Nineteenth Century to the Present
Seminar examining selected aspects of the architecture of downtown Providence from the late 19th century to the present. Projects require research at local archives, libraries, and architectural drawings collections. Enrollment limited to 20. Instructor permission required. A

Fall HIAA1910A S01 16874 T 3:00-5:20(14)  (D. Neumann)

1920 Individual Study Project in the History of Art and Architecture
Reading and reports on an approved topic, supervised by a member of the staff. Project proposals must be submitted and approved no later than the first week of the semester. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Fall; Spr

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. Instructor's permission required.

Fall; Spr

(Primarily for Graduates)

2540 Topics in the History of Printmaking
Enrollment limited to 10.

2540D The Theater that was Rome
"The Theater that was Rome" is a digital research site uniting text and images to portray the development of Rome (1500-1800) in the flood of printed information that proceeded from interest in the physical and mythological city. Our goal is to provide historical and critical interpretation of these illustrated books and prints that created Rome as a theater for the most advanced technological and decorative feats of an international group of artists, architects, engineers, authors, and publishers, looking at their productive collaborations, and using original materials, often in languages other than English, at the Hay Library and on the website. For graduate students; qualified upper-level undergraduates should contact the instructor. Enrollment limited to 15.

Fall HIAA2540D S01 17032 T 3:00-5:20(14)  (E. Lincoln)

2600 Research Seminar in Seventeenth-Century Art

2600E Jesuit Global Strategies in Art and Conversion
The purpose of this seminar is to examine the first global strategy to use art for the purpose of persuasion and conversion. In Europe, Asia, and the Americas during the early modern period, the Jesuits adapted their messages of visual communication, in architecture, prints, paintings, maps, dress, and rituals, to meet what they calculated would be the conceptual frameworks and customs of their target audiences, whether Chinese court officials, Flemish peasants. The seminar will search for the deeper historical roots of this strategy which up to now have not been traced. Open to graduate students only.

Spr HIAA2600E S01 26933 Th 4:00-6:20(16) (J. Muller)

2860 Topics in the History of Photography
This series of seminars will examine a range of topics in the history of photography, understood in relation to the history of art, visual culture, social history, the history of science and philosophy, and critical theory. Enrollment Limited to 15. Not Open to: Undergraduates.

2860A The Museum and the Photograph
This graduate seminar examines the relationship between two rapidly evolving modern institutions: the history of photography and the modern art museum. Through readings, discussions, and independent research, we will look at how the history of photography has been affected by its unique association with the museum, and what this means for it as a field of intellectual inquiry. Enrollment limited to 15.

Spr HIAA2860A S01 26922 M 3:00-5:20(13) (D. Nickel)

2870 Special Topics in History of Art and Architecture
Enrollment limited to 20.

2870F Facture: East and West
Objects are the tangible outcomes of available means of making. One can't understand the maker's choices unless one understands the maker's practical options. This seminar focuses on the materiality of objects by grounding them in the fundamentals of making material culture in Asia and the West – that is, facture. We explore ceramic technologies; lapidary crafts; and mosaics; metallurgy; painting mediums and surfaces; mass-production, and modules; realized outcomes of computer-assisted design. Instruction includes lecture-demonstrations by guest practitioners and site-visits to foundries, studios, conservation laboratories. Readings span history of technology, science and aesthetics, contemporary writings on the "thingness" of art history. Enrollment limited to 15 graduate students in History of Art and Architecture. Instructor permission required.

Spr HIAA2870F S01 26783 W 3:00-5:20(14) (R. Bickford)

2930 Practicum
Goya and the interpretation of war. Working with materials from the Brown collection and RISD Museum. Reading knowledge of Spanish and French strongly advised. Pre-approval required, please contact instructor by email. Open to graduate students only.

Fall HIAA2930 S01 16875 F 3:00-5:20(15) (C. Zerner)

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. Instructor's permission required.

Fall; Spr

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. Instructor’s permission required.

Fall; Spr

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. Instructor's permission required.

Fall; Spr

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. Instructor’s permission required.

Fall; Spr

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 11640 ‘To Be Arranged’
Spr HIAA2990 S01 21255 ‘To Be Arranged’

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 11641 ‘To Be Arranged’
Spr HIAA2991 S01 21256 ‘To Be Arranged’

Humanities see Cogut Center for Humanities

Hindi-Urdu see Center for Language Studies

International Relations

(For Undergraduates and Graduates)

1280 Global Security After the Cold War
Analyzes major contemporary issues of global security utilizing current theories of international politics, emphasizing both continuity and change in global security since the end of the Cold War. Issues examined include proliferation of weapons of mass destruction and of conventional weapons, terrorism, recent arms control and disarmament initiatives, and the changing role of alliances and regional and global security institutions. Prerequisite: POLS 0400. This course is open to Senior and Junior concentrators in IR and Political Science, and to other students by permission of the instructor.

Fall INTL1280 S01 14603 W 3:00-5:20(14) (M. Luong)

1350 History and Theory of International Relations
Examines the struggles of power and knowledge which have constituted international relations history and theory. This survey stretches from the beginnings of the Western states system and its early exemplar thinkers like Machiavelli, Grotius, and Kant, to the current issues and contemporary theories of international relations. Focuses primarily on the 'classical' and 'post-classical' theories of international relations.

Fall INTL1350 S01 17021 TTh 2:30-3:50(11) (J. Der Derian)
1400 Religion and Global Politics
Examines the increasingly visible role of religion in international affairs and global politics. What are the political manifestations of different religious traditions? What kind of a role does religion play in conflict, economic development, peace-building and diplomacy? Why was religion ignored as a political force in the western world? This course reviews multiple ways religion has been affecting world affairs and delves into specific faith traditions and their histories. Not open to first year students.

Fall INTL1400 S01 16327 MW 8:30-9:50(02) (N. Sandal)

1450 Political Economy of the Environment in Latin America
Introduces students to the political economy of the environment in Latin America. Readings survey topics on resource-based development, environmental conflict, and green governance. Lectures present theoretical accounts of development and the environment and assess their validity in light of the Latin American experience. Relies on history-based analytics and case studies. Topics include conservation of the Amazon, rights of indigenous peoples, mining and environmental well-being in the Andes, and the green revolution in tropical Latin America. Knowledge of Latin American history and politics, political-economy, and environmental studies recommended. Open to juniors, seniors, and graduate students.

Fall INTL1450 S01 16305 TTh 9:00-10:20(08) (J. Orihuela)

1800 Senior Seminars
These seminars constitute the capstone of the IR concentration. They integrate interdisciplinary approaches to the study of international relations around a specific topic of contemporary interest. Approximately eight to ten seminars per semester are offered on topics related to the four tracks. A complete list of topics, instructors, and times for the current semester may be obtained from the Program website or the International Relations Program office at 111 Thayer Street. Only seminars taken as a junior or senior meet the capstone requirement. Instructor's permission required. Enrollment limited to 20.

1800D Survey of Chinese Democracy and Chinese Contemporary History
Surveys the Chinese democracy movement in the 20th century and up to the present. Examines key leaders, events and development, including the Chinese Democracy Wall movement and the Chinese democratic party. Taught in Chinese. Readings in English and Chinese. Advanced Chinese language skills necessary. Instructor's permission required. Enrollment limited to 20.

Spr INTL1800D S01 20404 W 3:00-5:20(14) (W. Xu)

1800N Global Media: History, Theory, Production
Examines the historical and contemporary roles of media in international affairs as a source of information and as an important medium of war and diplomacy. Three tracks: historical, focusing on the dual development of colonial and media empires from early days of print media to the Internet; theoretical, using classical IR and critical theory to examine media as product and instrument of cultural, economic and political struggles; and practical, using biweekly "Global Media Labs" in which guest media practitioners teamed with media theorists present master classes in print, photography, radio, cinema, television, and online convergences. Instructor permission required. Enrollment limited to 20. WRIT

Spr INTL1800N S01 20444 W 3:00-5:20(14) (J. Der Derian)

1800R Post-Soviet States From the Past into the Future
Examines in historical context the emergence of the new post-Soviet states from the disintegrating USSR, the development of their foreign policies, and the evolution of their mutual relations in the political, economic, security, and environmental spheres. Devotes special attention to the functioning of the Community of Independent States and other multilateral institutions. Instructor's permission required. Enrollment limited to 20.

Fall INTL1800R S01 10549 F 3:00-5:20(15) (S. Khrushchev)

1800V The United States in World Politics
Examines major aspects of American foreign policy after the Cold War and 9/11 in terms of domestic and international challenges. Discussions of the United States as 'empire' and 'republic,' with independent research and a foreign policy game. Emphasis is on the connections between the processes of policy making and the substance of policies pursued. Prerequisite: POLS 0400 required; POLS 1560 highly recommended. Enrollment limited to 20 juniors and senior concentrators. WRIT

Spr INTL1800V S01 23896 T 4:00-6:20(16) (L. Miller)

1801G Nationalism, Colonialism, Religion, and International Law
Explores the internationalism of the past century in terms of its relationship to separtist nationalism, anti-colonialism, and religious radicalism. It takes as its point of departure the dramatic political, cultural, and intellectual transformations that followed in the wake of World War I. A guiding hypothesis of the seminar is that internationalism cannot be understood apart from its complex relationship to "identity" broadly conceived -- the identity of local or transnational groups as well as the identity of internationalists themselves. Readings will be drawn from law, cultural studies, politics, and postcolonial theory. Instructor permission required. Enrollment limited to 20, with priority given to junior and senior International Relations concentrators. Instructor's permission required. WRIT

Spr INTL1801G S01 26767 Th 4:00-6:20(16) (N. Berman)

1801I Public Theologies of Governance and Secularism in World Politics
Public theology of a particular issue includes human interpretation of what is relevant and to what extent particular religious premises can be experienced in the public arena. In the analyses of international politics, what we call "religion" is usually the sum of clashing or converging public theologies. This course comparatively investigates these different religious perspectives towards issues of political governance with case studies from Islam, Christianity, Judaism, Hinduism and Buddhism. The course also focuses on modes of secularism and the challenges they pose to political theologies of faith traditions. Enrollment limited to 20 juniors and seniors. Instructor permission required.

Spr INTL1801I S01 26182 "To Be Arranged" (N. Sandal)

1910 Senior Honors Seminar
Open only to Senior students accepted into the honors program in international relations. Instructor permission required. WRIT

Fall INTL1910 S01 10563 W 6:30-8:50 PM(18) (C. Elliott)

1920 Senior Honors Thesis
Open only to Senior students accepted into the honors program in international relations. Instructor permission required. WRIT

Spr

1970 Individual Research Project
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.

Fall; Spr

XLIST Courses of Interest to Students Concentrating in International Relations
For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
Italian Studies

(Primarily for Undergraduates)

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. Five meetings per week, audio and video work, two Italian films. Note: This is a year course. Enrollment limited to 18.

Fall ITAL0100 S01 10659 MWF 1:00-1:50 & TTh 1:00-2:20(18) (C. Abbona-Sneider)
Fall ITAL0100 S02 10660 MWF 10:00-10:50 & TTh 9:00-10:20(18) (C. Abbona-Sneider)
Fall ITAL0100 S03 10661 MWF 10:00-10:50 & TTh 10:30-11:50(18) (C. Abbona-Sneider)
Fall ITAL0100 S04 10662 MWF 11:00-11:50 & TTh 10:30-11:50(18) (C. Abbona-Sneider)
Fall ITAL0100 S05 10663 MWF 11:00-11:50 & TTh 1:00-2:20(18) (C. Abbona-Sneider)

0110 Intensive Elementary Italian
Covers the same material presented in Italian 100-200. One semester equivalent to the standard two-semester sequence. Sufficient for enrollment in the yearlong Bologna Program. Eight meetings per week plus audio and video assignments.

Sum ITAL0110 S01 60347 "To Be Arranged" (A. DiMartino)

0200 Elementary Italian
See Elementary Italian (ITAL 0100) for course description. Enrollment limited to 18.

Spr ITAL0200 S01 20513 MWF 1:00-1:50 & TTh 1:00-2:20(18) (C. Abbona-Sneider)
Spr ITAL0200 S02 20514 MWF 10:00-10:50 & TTh 9:00-10:20(18) (C. Abbona-Sneider)
Spr ITAL0200 S03 20515 MWF 10:00-10:50 & TTh 10:30-11:50(18) (C. Abbona-Sneider)
Spr ITAL0200 S04 20516 MWF 11:00-11:50 & TTh 10:30-11:50(18) (C. Abbona-Sneider)
Spr ITAL0200 S05 20517 MWF 11:00-11:50 & TTh 1:00-2:20(18) (C. Abbona-Sneider)

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 placement by examination. Requirement for enrollment in the Bologna Program. Enrollment limited to 18.

Fall ITAL0300 S01 10664 MWF 12:00-12:50 & TTh 12:00-12:50(18) (C. Abbona-Sneider)
Fall ITAL0300 S02 10665 MWF 1:00-1:50 & TTh 12:00-12:50(18) (C. Abbona-Sneider)
Fall ITAL0300 S03 10666 MWF 2:00-2:50 & TTh 12:00-12:50(18) (C. Abbona-Sneider)

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. Enrollment limited to 18.

Spr ITAL0400 S01 20518 MWF 12:00-12:50 & TTh 12:00-12:50(18) (C. Abbona-Sneider)
Spr ITAL0400 S02 20519 MWF 1:00-1:50 &

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 10667 TTh 2:30-3:50 & W 2:00-2:50(11) (C. Abbona-Sneider)

0550 Florence and Tuscany in the Fifteenth Century (HIAA 0550)
Interested students must register for HIAA 0550 S01 (CRN 16866).

0560 The Visual Culture of Early Modern Rome (HIAA 0560)
Interested students must register for HIAA 0560 S01 (CRN 26627).

0600 Advanced Italian II
A two-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 20520 TTh 2:30-3:50(11) (C. Abbona-Sneider)

0751 When Leaders Lie: Machiavelli in International Context
This course examines the writing of Niccolò Machiavelli, a Renaissance author praised and condemned for his insistence on analyzing the realities of politics, rather than the ideals of political behavior. Machiavelli's view of the tenuous relationship of ethics to politics has cast him as the founder of political science and the proponent of "consequential morality" or the notion that the ends justify the means. We will also examine precedents for his ideas in the Greek and Islamic world and conclude by examining the relevance of Machiavelli's insights for understanding political practices and ethics in the twenty-first century. Enrollment limited to 20 first year students. FYS LILE WRIT

Spr ITAL0751 S01 26870 M 3:00-5:20(13) (C. Castiglione)

(For Undergraduates and Graduates)

1000 Studies in Contemporary Italian Culture
An introduction to contemporary Italian culture, history and society. Topics vary from year to year and instructor to instructor. Taught in English or Italian.

1000B Reading Recent Italian Fiction
"Reading" here implies a special kind of attention to the linguistic formulation of the text and the construction of an imaginary hypertext based on the stimuli the text provides. The instructor exemplifies the process and students construct hypertexts of their own based on the texts. Of particular interest is the openness and interpretive richness derived from the readers not belonging to the cultural context in which the texts were produced. Prerequisite: ITAL 0600.

Fall ITAL1000B S01 16979 TTh 2:30-3:50(11)

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
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Interested students must register for HIST 1430 S01 (CRN 16933).
Interested students must register for HIAA 1550B S01 (CRN 26914).

1020 Boccaccio's Decameron and the End of the World
Close study and discussion of Boccaccio’s collection of 100 tales told by ten narrators over a period of two weeks, while in flight from the devastating plague of 1348. The Decameron defined the standard of Italian prose narrate for almost four centuries, and furnished a great number of the plots of Italian (and French and English) Renaissance drama. Students will be invited to contribute to the Decameron Web, the Boccaccio award-winning web site administered by the department of Italian Studies. Other, shorter, works of Boccaccio will be read to prepare for tackling the Decameron. Sections in both English and Italian. Enrollment limited to 40. WRIT

Fall ITAL1020 S01 20521 W 3:00-5:20(14) (R. Martinez)

1030 Realism and Utopia in Italian Cinema

1030A Modernity, Italian Style
Italian cinema of the 1960s and 1970s, from Neo-realism to the Neo-avant-garde and from Comedy to Political film. We will review the cinematic construction of the Modern, focusing in particular on issues of Space/Representation, Time/Narrative and Gender/Genre in major works by Fellini, Antonioni, Visconti, Pasolini, Bertolucci, Rosi, Pontecorvo, Belloccio, Gemi, Leone, Argento, Petri and Caveni. Lectures in English; discussion group in Italian.

Fall ITAL1030A S01 16787 TTh 1:00-2:20(10)

1400 Special Topics in Italian Studies
Seminars on topics that transcend usual course boundaries and are of special concern to a member of the department. Undergraduates explore the ramifications of the topic under the direction of the instructor.

1400J The Many Faces of Casanova
Philosopher or charlatan, magician or trickster, seducer or seduced, Casanova’s life contains multitudes. His name, unlike those of Sade or Sacher Masoch, does not designate a “perversion,” but a sort of exuberant hetero-sexual “normalcy.” He is the Venetian alter-ego (and possibly real-life inspiration) of Mozart’s Don Juan. In this course, we will dissect the myth of Casanova, from his own monumental autobiography to novels, films and plays which cast him as protagonist (films by Federico Fellini, Ettore Scola, Lasse Hallström, impersonations by Donald Sutherland, Marcello Mastroianni and Heath Ledger). Lectures in English; discussion group in Italian.

Spr ITAL1400J S01 26395 TTh 1:00-2:20(10)

1431 Truth on Trial: Justice in Italy, 1400-1800 (HIST 1430)
Interested students must register for HIST 1430 S01 (CRN 16933).

1550B Topics in the Early History of Printmaking: Festival and Carnival (HIAA 1550B)
Interested students must register for HIAA 1550B S01 (CRN 26914).

1580 Word, Image and Power in Renaissance Italy
This class is designed to introduce cultural and historical perspectives on Italy from Siena in the Middle Ages to Venice in the High Renaissance. Taught by professors of Italian Literature, Art History and History, we will move across Italy and the centuries focusing on monuments of literature, art, architecture, and history through different disciplinary lenses. WRIT

Fall ITAL1580 S01 17160 MWF 11:00-11:50(04) (C. Castiglione)

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 16648 Th 4:00-6:20(13) (R. Martinez)

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 20522 M 3:00-5:20(13) (R. Martinez)
Spr ITAL1620 S01 20522 M 3:00-5:20(13) (R. Martinez)

1920 Independent Study Project
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.

Fall Spr

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.

Fall Spr

(Primarily for Graduates)

2300 Seminar in Italian Literature, Culture, and Criticism
In this team-taught seminar, Simona Colarizi (La Sapienza, Rome) and Andrea Cristiani (University of Bologna) and resident faculty will lead seminars on problems and approaches to Italian literature, culture, and criticism in the Modern period. Prof. Colarizi will offer two seminars on the fashioning of consensus under Fascism and in the postwar period, and Prof. Andrea Cristiani will offer four seminars on the rhetoric of the sentiments during the long nineteenth century (c. 1770-1920). Readings will be drawn from literature, philosophy, history, and criticism. Enrolled students will develop projects, ultimately leading to a term paper, during the first six weeks of the course and present provisional results in student-led seminars, with the facilitation of resident faculty, during the month of November.

Spr ITAL2300 S01 26792 Th 4:00-6:20(16) (S. Stewart-Steinberg)

2540D The Theater that was Rome (HIAA 2540D)
Interested students must register for HIAA 2540D S01 (CRN 17032).

2550 Gender Matters
This course examines the impact of gender as a category of historical analysis. Beginning with Joan Scott's seminal work on the topic (1986), students assess its subsequent global impact. Two Italian issues are considered in this comparative context: Is gender analysis still gender analysis if the word gender is not employed? How has the study of masculinity, sexuality, and queer studies opened new lines of inquiry? The recasting of women as moral beings and the experiences of Benvenuto Cellini will be used as case studies to examine these questions. Students work in their own geographical area for their final project. Open to seniors and graduate students.

Fall ITAL2550 S01 17174 M 3:00-5:20(13) (C. Castiglione)

2820 Italian Studies Colloquium

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkssearch_public.P_Main).
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 14729 W 5:30-7:00(18) (R. Martinez)
Spr ITAL2820 S01 24587 W 5:30-7:00(18) (R. Martinez)

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 10685 'To Be Arranged'
Spr ITAL2970 S01 20533 'To Be Arranged'

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.

Fall; Spr

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 10686 'To Be Arranged'
Spr ITAL2990 S01 20539 'To Be Arranged'

Japanese see East Asian Studies

Judaic Studies
(Primarily for Undergraduates)

0050 Freshman Seminars
Enrollment Limited to 20 first year students.

0050A Believers, Agnostics, and Atheists in Contemporary Fiction
Contemporary society is divided over issues of religious faith. In recent decades there has been a resurgence of religious faith, while at the same time many have been skeptical and even hostile to religious belief and practice. Others are just not sure what to believe. In this seminar, we will read and discuss contemporary short stories that explore the ways that these ongoing differences over spiritual matters affect people. These works portray a variety of human situations: the affirmation and rejection of religious faith, confusion over the existence and nature of God, and positive and negative views of religious institutions and the clergy who lead them. Writers of both Christian and Jewish background will be studied. Enrollment limited to 20 first year students. FYS

Fall JUDS0050A S01 14060 MWF 9:00-9:50(02) (D. Jacobson)

0050D Astrology, Magic, and Science
What did the universe look like before modern science? How did Christians, Muslims, and Jews imagine the natural world and humanity's place in it? Astrology, magic, and science played important roles in medieval attempts to explain the origins of the universe and the forces that govern the world. They sometimes challenged religious authority by competing with it as sources of truth. We will examine the interrelationship of astrology, magic, science, and religion in Western culture from the medieval to the early modern period and the

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0100 Contemporary Religion: Qualitative Methods
Through readings, films and fieldwork, course participants will learn how social scientists interpret contemporary religious practices, culture and folkways. By studying religious communities through the lens of social theory and method, this class critically examines major themes in anthropology, sociology, psychology, and linguistics: race, nationalism, diaspora, kinship, gender, and modernity.

Spr JUDS0100 S01 26451 TTh 1:00-2:20(10) (M. Brink-Danan)

0110 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 to a variety of cultural issues. If unable to enroll because of closed registration, please contact the professor and a wait list will be created. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in JUDS 0120 covers the entire year and is recorded as the final grade for both semesters. Enrollment limited to 20.

Fall JUDS0110 S01 10131 MWF 11:00-11:50 & TTh 10:30-11:50(04) (R. Adler Ben Yehuda)

0120 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 to a variety of cultural issues. Prerequisite: JUDS 0110. Students must have taken JUDS 0110 to receive credit for this course. If JUDS 0110 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 20.

Spr JUDS0120 S01 20127 MWF 11:00-11:50 & TTh 10:30-11:50(04) (R. Adler Ben Yehuda)

0130 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: JUDS 0120 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 JUDS0130 S01 10159 MWF 12:00-12:50 & TTh 12:00-12:50(12) (R. Adler Ben Yehuda)

0140 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: JUDS 0130 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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
0150 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: JUDS 0140 or equivalent.

Fall JUDS0150 S01 10160 TTh 9:00-10:20(08) (R. Adler Ben Yehuda)

0170 Introduction to Biblical Hebrew
An intensive introduction to the fundamentals of biblical Hebrew grammar and vocabulary intended to prepare students to read biblical texts in the original language. For students with little or no prior knowledge of Hebrew.

Fall JUDS0170 S01 16697 MWF 9:00-9:50(02)

0180 Readings in Biblical Hebrew
An introduction to the reading of biblical texts in Hebrew. Reading of selected texts from narrative, law, and poetry in the Hebrew Bible, with a few texts in post-classical Hebrew (the Dead Sea Scrolls and the Mishnah) introduced late in the semester. Intended for students who have completed JUDS 0170; others should consult the instructor.

Spr JUDS0180 S01 26452 MWF 9:00-9:50(02)

0260 The Bible as Literature
Explores how methods of literary analysis can be applied to the reading of narratives of the Old Testament/Hebrew Bible (in English translation). Also compares the ways that modern writers have transformed biblical stories into new interpretive literary works. For students interested in an introduction to the Bible, as well as students with a knowledge of the Bible who want to deepen their understanding of biblical narratives and investigate the influence of the Bible on modern literature. All readings in English.

Fall JUDS0260 S01 16698 MWF 10:00-10:50(03) (D. Jacobson)

0300 Israeli Literature in Hebrew
For students interested in reading selections of Hebrew fiction, drama, and poetry. Concentrates on major issues of the State of Israel, for example: the relationship between modernity and tradition, responses to the Holocaust, the Arab-Israeli conflict, and other cultural, social, and political issues. Israeli feature films are viewed and discussed. Conducted in Hebrew. Emphasizes strengthening Hebrew reading, writing, and speaking skills. Prerequisite: JUDS0150. Students who have not taken JUDS0150 should see instructor for permission to enroll.

Spr JUDS0300 S01 24015 MWF 9:00-9:50(02) (D. Jacobson)

0470 The Old Testament/Hebrew Bible and Its World
An introduction to the historical-critical study of the Hebrew Bible and a reconstruction of the history of Israel to the end of the Persian period (332 B.C.E.). Topics include biblical source criticism; Israel's obscure origins; reconstructing the settlement period; an imperial Israel under David and Solomon; institutions-law and authority, covenant, prophecy, temple cult and priesthood. All readings in translation. No prerequisites.

Spr JUDS0470 S01 26453 MWF 1:00-1:50(06) (S. Olyan)

0650 History of Zionism and the Birth of the State of Israel
Examines the history of the Zionist movement within the context of the history of European nationalism and as one of numerous Jewish political responses to rising antisemitism. Explores the ideological and political foundations of the Zionist movement until Israel's establishment as well as broader concerns of Jewish politics in the late 19th and early 20th centuries.

Fall JUDS0650 S01 16699 TTh 2:30-3:50(11) (M. Mandel)

0980 Seminar in Judaic Studies
Enrollment Limited to 20.

0980A Memoirs and Memory: The Individual Experience of Modern Jewish Life
By comparing memoirs from the early modern period through contemporary times and from widely divergent geographical settings such as eastern, central and western Europe, North Africa, the U.S., and Palestine/Israel, this course considers how Jews in different historical settings have understood their “Jewishness” and their relationship to their past, as well as the historian’s role in this relationship. Enrollment limited to 20.

Spr JUDS0980A S01 26454 M 3:00-5:20(13) (M. Mandel)

0980W The Israel-Palestinian Conflict: Contested Narratives (UNIV 0980)
Interested students must register for UNIV 0980 S01 (CRN 26779).

0980X 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 the course will also have the opportunity to develop a basic knowledge of the Yiddish language.

Fall JUDS0980X S01 16700 MWF 2:00-2:50(07) (R. Rojanski)

0990 Topics in Judaic Studies

0990F Religion and Sexuality
For millennia, religious thinkers have wrestled with the nature of sexuality. This class will examine how these thinkers have dealt with the essential questions that sexuality raises. Why do humans have sexual desire? Are there proper limits to sexual activity? While the focus of this class will be on Judaism and Christianity from antiquity to the present, we will also discuss Hindu, Muslim, and Tantra views. Topics to be addressed include: the nature and purpose of human sexual desire; contraception; adultery; homosexuality; abortion; and masturbation. No prerequisites. WRIT

Fall JUDS0990F S01 17028 MWF 1:00-1:50(06) (M. Satlow)

0990G Difficult Relations? Judaism and Christianity from the Middle Ages until the Present
Jewish and Christian identity in Europe has traditionally been closely connected to the ways the two religions view each other. Mutual admiration, influence, and hatred have combined together in a difficult relationship, fundamental to European history. In this course, we will survey that relationship, examining some key issues and events which shaped it. The Jews’ attitudes and actions will be examined alongside those of their Christian neighbors. Topics covered include: medieval revulsion and attraction; early modern re-evaluations of Judaism and Christianity; modern Christian anti-Semitism, Jewish diplomacy, and the Holocaust; the effects of Vatican II; Israel and the contemporary Christian world.

Fall JUDS0990G S01 16743 TTh 1:00-2:20(10) (A. Teller)

0990H New York, Warsaw, Tel Aviv. Buenos Aires: Transnational Jewish Cultures in the 20th Century
Being a diasporic people without a nation-state until the mid-20th century, the Jews in Eastern Europe created Jewish cultures that were also influenced by the non-Jewish environment. How did these cultures

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public.P_Main).
develop in the age of mass migrations? How did the new Jewish cultures express the ideas of “homeland” and “diaspora?” Was the Jewish/Hebrew culture created in Israel part of the Jewish cultural discourse, or did it define itself separately? During the course, we will explore Jewish culture in four cities, also examining their relations with each other, in order to understand the transnational nature of these unique Jewish cultures. Enrollment limited to 40.

Fall JUDS0990H S01 17027 M 3:00-5:20(13) (R. Rojanski)

**0990J Body and Society: Medicine and Medical Ethics in the Pre-modern World**

This course examines approaches to the human body, medical ethics, and sexual identity in medieval Western culture and society. We will begin with the theory and practice of medicine, comparing the Arabic tradition of the tenth through twelfth centuries with that of Christian Europe in the thirteenth through fifteenth centuries and tracing the Jewish medical tradition as well. We will then turn to ethical issues, including contraception and abortion, the doctor-patient relationship, intractable conditions, and the moral dimension of disease. Enrollment limited to 40.

Spr JUDS0990J S01 26475 T 4:00-6:20(16) (M. Kozodoy)

**0990L Jews Between Christians and Moslems in the Early Modern World**

What were the different experiences for Jews living amongst Christians and Moslems? How did Islam and Christianity affect the development of Jewish society and culture? This course will examine these questions by looking at two flourishing Jewish centers from 1500-1800: one in the Moslem Ottoman Empire, the other in the Christian Polish-Lithuanian Commonwealth. Topics to be discussed include: Christian and Moslem attitudes towards Jews and the Jews' response to them; Jewish communities in Polish and Ottoman towns; the development of Jewish law in both settings; Christianity, Islam, and anti-Jewish violence; the interactions of Jewish, Moslem, and Christian mystical movements. Enrollment limited to 20.

Spr JUDS0990L S01 26776 Th 4:00-6:20(16) (A. Teller)

**0990M Friendship in the Ancient World (RELS 0090F)**

Interested students must register for RELS 0090F S01 (CRN 16664). Enroll in Banner with CRN 16664.

**0990N Becoming French: Minorities and the Challenges of Integration in the French Republic (HIST 0980B)**

Interested students must register for HIST 0980B S01 (CRN 26793).

**(For Undergraduates and Graduates)**

**1410 The Talmud**

Written from the first - seventh centuries CE, the Talmud (which runs to 20 volumes) contains law, lore, theological speculation, and complex argumentation. We will read a selection in depth and examine both traditional and modern critical (e.g. historical and literary) approaches to this fundamental text. No prerequisites; all texts in English translation. Enrollment limited to 20. DVPS LILE WRIT

Spr JUDS1410 S01 26777 W 3:00-5:20(14) (M. Satlow)

**1970 Individual Study Projects**

Section numbers vary by instructor. Please see Banner for the correct course reference number (CRN) to use when registering for this course. Fall; Spr

**1980 Advanced Seminar in Judaic Studies**

Enrollment limited to 20.

**1980K Biblical History: What Really Happened?**

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.

Spr JUDS1980K S01 26468 M 3:00-5:20(13) (S. Oyman)

**1981J Gender, Sex, and Crime in Modern Yiddish Culture**

Modern Yiddish literature, from its earliest days, used female characters to present the Jewish experience. From portrayals of women in traditional roles, it began to explore changing gender issues in the 20th century, including erotic experience, the move to the public sphere, and even the descent to the social margins and crime. We will examine these issues by reading and discussing Sholem Aleichem's classic, Tevye the Dairyman (the source of Fiddler on the Roof) and later Yiddish authors, such as Sholem Ash and Bashevis Singer (including his story, Yentl), in English translation. Enrollment limited to 40.

Spr JUDS1981J S01 26778 W 3:00-5:20(14) (R. Rojanski)


Interested students must register for HIST 1976R S01 (CRN 16954).

**1981L Co-Existence and Conflict: Polish-Jewish Relations From 1500 Until Today (HIST 1552)**

Interested students must register for HIST 1552 S01 (CRN 26695).

**1981M The 'New Jew' and the Diaspora: Voices from Israel, Brazil and America (POBS 1500W)**

Interested students must register for POBS 1500W S01 (CRN 17020).

**Korean see East Asian Studies**

**Center for Language Studies**

**American Sign Language**

*(Primarily for Undergraduates)*

**0100 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 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. Enrollment limited to 18.

Fall SIGN0100 S01 10535 MWF 11:00-11:50 & TTh 10:30-11:50(04) (A. Belozovsky)

**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...
### 136 / Center for Language Studies

Policy must be approved by both the academic department and the Committee on Academic Standing. Enrollment limited to 18.

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<tr>
<th>Fall</th>
<th>ARAB0100</th>
<th>S01</th>
<th>10520</th>
<th>MWF 9:00-9:50 &amp; TTh 10:30-11:50(04)</th>
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<td>TTh 9:00-10:20(17)</td>
<td>Fall ARAB0100 S02 10522 MWF 2:00-2:50 &amp; TTh 2:30-3:50(17)</td>
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<td>Fall ARAB0100 S03 15072 MWF 4:00-4:50 &amp; TTh 4:00-5:20(17)</td>
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### 0300 American Sign Language III

Explores sociolinguistic aspects of ASL within the Deaf cultural context. Focuses on classifiers, linguistic principles related to dialogues and storytelling techniques (e.g., role-shifting, narrative structure). Deaf culture is experienced by attending events and by voluntary service to the Deaf community. Prerequisite SIGN 0200 or placement interview. Enrollment limited to 18.

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<tr>
<th>Fall</th>
<th>SIGN0300</th>
<th>S01</th>
<th>11615</th>
<th>MWF 2:00-2:50 &amp; TTh 2:00-2:50(07)</th>
<th>(A. Belozovsky)</th>
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### 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. Enrollment limited to 18.

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<tr>
<th>Fall</th>
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<td>MWF 12:00-12:50 &amp; TTh 12:00-12:50(05)</td>
<td>(A. Belozovsky)</td>
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</table>

### 0500 American Sign Language V

Focuses on the use of ASL discourse in formal as well as informal settings. Students will explore and present the advanced ASL genres of public speaking, artistic expression, formal discussion, interview, and narrative projects. Development of ASL vocabulary in specialized area not covered in previous courses. Prerequisite: ASL IV (SIGN 0400) or equivalent. Enrollment limited to 18.

| Fall | SIGN0500 | S01 | 26722 | MWF 2:00-3:20(07) | (A. Belozovsky) |

### (For Undergraduates and Graduates)

#### 1910 Independent Study in Sign Language/Deaf Studies

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. DVPS LILE

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<th>Fall</th>
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<th>SIGN0500</th>
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<td>MWF 2:00-3:20(07)</td>
<td>(A. Belozovsky)</td>
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### Arabic

#### (Primarily for Undergraduates)

#### 0100 First-Year Arabic

Builds basic listening, speaking, reading, and writing skills, introducing the Arabic language in its cultural environment. Six 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.

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<tr>
<th>Fall</th>
<th>ARAB0100</th>
<th>S01</th>
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<th>MWF 9:00-9:50 &amp; TTh 9:00-10:20(17)</th>
<th>Fall ARAB0100 S02 10522 MWF 2:00-2:50 &amp; TTh 2:30-3:50(17)</th>
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<td>Fall ARAB0100 S03 15072 MWF 4:00-4:50 &amp; TTh 4:00-5:20(17)</td>
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### 0200 First-Year Arabic

Builds listening, speaking, reading, and writing skills, at the low intermediate level of Arabic proficiency. Six 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. If course is full, please sign the wait list in Room 205, 195 Angell Street. Enrollment limited to 18.

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### 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. Six 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.

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<td>15763</td>
<td>MWF 1:00-1:50 &amp; TTh 1:00-2:20(17)</td>
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### 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. Six 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. If course is full, please sign the wait list in Room 205, 195 Angell Street.

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### 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. Five contact hours weekly. Prerequisite: ARAB 0400.

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<th>Fall</th>
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For complete, up-to-date course information please see or the Brown Course Search tool ([https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main](https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main)).
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. Five contact hours weekly. Prerequisite: ARAB 0600.

Spr ARAB0600 S01 21215 MWF 12:00-12:50 & TTh 12:00-12:50(05)
Spr ARAB0600 S02 24897 MWF 12:00-12:50 & TTh 12:00-12:50(05)

0700 Fourth-Year Arabic
Builds advanced Arabic competence, using communicative approaches to the learning of content, function, and accuracy. Guided reading, writing and research. Three contact hours weekly. Prerequisite: ARAB 0600.

Fall ARAB0700 S01 10525 MW 12:00-1:30(12)

0800 Fourth-Year Arabic
Builds advanced Arabic competence, using communicative approaches to the learning of content, function, and accuracy. Guided reading, writing and research. Three contact hours weekly. Prerequisite: ARAB 0700.

Spr ARAB0800 S01 21216 MW 12:00-1:30(05)

(For Undergraduates and Graduates)

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.

Fall; Spr

English for Internationals

(Primarily for Graduates)

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 10526 MWF 11:00-11:50 & TTh 11:00-11:50(04) (B. Gourlay)
Spr EINT2100 S01 26474 MWF 11:00-11:50 & TTh 11:00-11:50(04) (B. Gourlay)

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 10527 MWF 12:00-12:50 & TTh 12:00-12:50(12) (B. Gourlay)
Spr EINT2200 S01 21217 MWF 12:00-12:50 & TTh 12:00-12:50(05) (B. Gourlay)

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 10528 MWFTh 9:00-9:50(02) (B. Gourlay)
Spr EINT2300 S01 21218 MWTTh 9:00-9:50(02) (B. Gourlay)

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 10529 MW 9:00-9:50(02) (B. Gourlay)
Fall EINT2400 S02 10530 TTh 9:00-9:50(06) (B. Gourlay)
Spr EINT2400 S01 21219 MW 9:00-9:50(02) (B. Gourlay)
Spr EINT2400 S02 21220 TTh 9:00-9:50(08) (B. Gourlay)

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 10531 MWF 12:00-12:50 & TTh 12:00-12:50(12) (B. Gourlay)
Spr EINT2500 S01 21221 MWF 12:00-12:50 & TTh 12:00-12:50(05) (B. Gourlay)

Hindi-Urdu

(Primarily for Undergraduates)

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 10532 MWF 12:00-12:50 & TTh 12:00-12:50(12) (A. Koul)

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 21222 MWF 12:00-12:50 & TTh 12:00-12:50(05) (A. Koul)

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 10533 MW 1:00-1:50 & Th 4:00-4:50(06) (A. Koul)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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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 21223 MWF 1:00-1:50 & Th 4:00-4:50(06) (A. Koul)

(For Undergraduates and Graduates)

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 10534 "To Be Arranged" (A. Koul)
Spr HNDI1080 S01 21224 "To Be Arranged" (A. Koul)

Persian

(Primarily for Undergraduates)

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. Enrollment limited to 18.

Fall PRSN0100 S01 13684 MWF 1:00-1:50 & Th 1:00-2:20(10) (I. Anvar)

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. Enrollment limited to 18.

Spr PRSN0200 S01 23622 MW 1:00-1:50 & TTh 1:00-2:20(10) (I. Anvar)

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. Enrollment limited to 18.

Fall PRSN0300 S01 14062 TTh 11:00-12:50(09) (I. Anvar)

0400 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 0300. Enrollment limited to 18.

Spr PRSN0400 S01 23654 TTh 11:00-12:50(09) (I. Anvar)

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, 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. Enrollment limited to 18.

Fall PRSN0500 S01 14589 MW 2:00-3:50(07) (I. Anvar)

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. Enrollment limited to 18.

Spr PRSN0600 S01 24511 MW 2:00-3:50(07) (I. Anvar)

(For Undergraduates and Graduates)

1200 Iranian Cinema: Before and After the Islamic Revolution
This course provides an overview of Iranian Cinema in general and explores in detail Iranian cinema after the Iranian revolution. It explores the politics, history, techniques and the art of cinema of the past several decades in Iran. Classes consist of screenings, discussions and lectures. Conducted in English, open to all students. DVPS LILE

Spr PRSN1200 S01 26723 "To Be Arranged" (I. Anvar)

Latin American and Caribbean Studies

Haitian Creole

(Primarily for Undergraduates)

0100 Basic Haitian Creole
Fast-paced course for beginners. Course stresses acquisition of skills in speaking and listening comprehension; writing included to a lesser degree. Strong emphasis on cultural as well as linguistic competency. Enrollment limited to 18. If the course is full, please sign the wait list in room 215, 111 Thayer Street.

Fall CROL0100 S01 12477 MW 3:00-5:20(13) (P. Sylvain)
Spr CROL0100 S01 23283 MW 3:00-5:20(13) (P. Sylvain)

0200 Early Intermediate Creole
Fast-paced course for beginners. Course stresses acquisition of skills in speaking and listening comprehension; writing included to a lesser degree. Strong emphasis on cultural as well as linguistic competency. Enrollment limited to 18. If the course is full, please sign the wait list in room 215, 111 Thayer Street.

Fall CROL0200 S01 13528 MW 6:30-8:20 PM(18) (P. Sylvain)
Spr CROL0200 S01 21689 MW 6:30-8:20 PM(18) (P. Sylvain)

0300 Advanced Intermediate Haitian Creole
Fast-paced course for advanced/intermediate students of Haitian Creole. Designed for those who speak and understand Haitian Creole with some fluency but are seeking ways of perfecting their language

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
skills, overcoming grammatical snags, increasing vocabulary, and mastering the idiomatic use of the language and proverbs. Reading and responding to authentic literature in Haitian Creole will be the focus of the course. Prerequisite: CROL 0200. Enrollment is limited to 18. If course is full, please sign the wait list in Rm. 215, 111 Thayer Street. DVPS

Fall CROL0300 S01 13781 MWF 1:00-1:50(06) (P. Sylvain)
Spr CROL0300 S01  24074 MWF 1:00-1:50(06) (P. Sylvain)

0400 Advanced Haitian Creole
Designed for those who wish to develop more advanced level conversational, reading, and writing skills. Students work with a variety of readings (stories, poems, plays), films, interviews, and popular songs that promote in-class discussion and written analysis. Extensive practice in translating from English to Haitian and vice versa, with the aim of developing accuracy, speed, and appropriateness (lexical, grammatical, and cultural). Prerequisite: CROL 0300. Enrollment limited to 20.

Fall CROL0400 S01 15385 F 3:00-5:20(15) (P. Sylvain)
Spr CROL0400 S01  24931 F 3:00-5:20(15) (P. Sylvain)

Latin American Studies

(For Undergraduates and Graduates)

1990 Individual Thesis Preparation
For Latin American Studies concentrators writing senior projects or honors theses.
Fall

1991 Individual Thesis Preparation
For Latin American Studies concentrators writing senior projects or honors theses.
Spr

Fall XLIST Courses of Interest to Students Concentrating in Latin American Studies

The following courses, offered in other departments, may be of interest to students concentrating in Latin American Studies. Please see the course listing of the sponsoring department for times and locations.

Anatomy
ANTH 0066 Transnational Lives: Anthropology of Migration and Mobilities

Comparative Literature
COLT 0610E Crisis & Identity in Mexico, 1519-1968

English
ENGL 1430 Psychology of Race, Class and Gender

Hispanic Studies
HISP 0100 Basic Spanish
HISP 0300 Intermediate Spanish I
HISP 0500 Advanced Spanish Conversation/Hispanic Cultures & Civilization
HISP 0600 Advanced Composition
HISP 0730 Early Contemporary Writers of Spanish America
HISP 0740 Intensive Survey of Spanish Literature
HISP 1303T The Philosophy of Borges

History
HIST 0970Z Atlantic Pirates
HIST 1620 Colonial Latin American

Music
MUSC 0021 Latino Diaspora Music

Portuguese and Brazilian Studies
POBS 0100 Elementary Portuguese
POBS 0110 Intensive Portuguese
POBS 0400 Writing & Speaking Portuguese
POBS 0610 Mapping Portuguese-Speaking Cultures: Brazil
POBS 0810 Belonging and Displacement: Cross Cultural Identities
POBS 0910 On the Dawn of Modernity
POBS 1030 Portuguese Stylistics: Advanced Language Study and...
Writing I workshops are not open to those students who have taken intermediate or advanced workshops in that genre. Enrollment limited to 17. WRIT

**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 10629 T 1:30-5:30
- **Fall** LITR0110A S02 10630 W 3:00-5:20(13)
- **Fall** LITR0110A S03 10631 Th 5:00-7:20(13)

**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 10629 T 4:00-6:20(13)
- **Fall** LITR0110B S02 10630 W 3:00-5:20(14)
- **Fall** LITR0110B S03 10631 Th 5:00-7:20(13)

**0110D Electronic Writing 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 Students MUST register for a lab, and a lecture section.

- **Fall** LITR0110D S01 17180 T 12:00-2:20(10)
- **Spr** LITR0110D S01 26938 T 12:00-2:20(10)

**0110E Screenwriting I**
A workshop for students who have little or no previous experience in writing screenplays. This course is limited to undergraduates. S/NC. Enrollment limited to 17.

- **Sum** LITR0110E S01 60372 MW 9:00-1:00
- **Fall** LITR0110E S01 16653 F 3:00-5:20(15)

**0200Z Faking It: Literature in the Age of the Hoax**
How is society simultaneously constructed and undermined by the persistence of fakes? With its cousins the hoax and the forgery, the fake plays the straw man in much of political, religious, and philosophical discourse, but the fake’s insistence on re-conceiving notions of originality and purity is more substantial. Pursuing a definition of the fake, we will consider its many forms in contemporary society alongside novels that parody and complicate the history of the fake. Writing includes frequent exercises inspired by the films and structural matters like controlling switches in time. See general course description above for course entry procedures for all intermediate workshops. Written permission required. Enrollment limited to 17. S/NC. WRIT

- **Fall** LITR0200Z S01 60426 MWF 4:00-6:40 (C. Holmes)

All writing samples are due at 68-1/2 Brown Street between 10 am and 4 pm on the first day of the semester. Permission will be issued by the instructor after the manuscripts have been reviewed. A student may take LITR 0210 up to six times for credit, but no more than three sections may be in one genre or interdisciplinary area. WRIT

**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. Written permission required. Enrollment limited to 17. S/NC. WRIT

- **Fall** LITR0210A S01 10645 M 5:30-7:50(18)
- **Spr** LITR0210A S01 20502 M 5:30-7:50(18)

**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. Enrollment limited to 17. S/NC. WRIT Students MUST register for a lab, and a lecture section.

- **Fall** LITR0210B S01 14419 T 4:00-6:20(13)
- **Spr** LITR0210B S01 20504 T 4:00-6:20(16)

**0210D Electronic Writing II**
Project-oriented workshop for writers, visual/sound artists, filmmakers, and programmers wishing to explore techniques for effective and innovative use of text in digital media. Topics include hypertext narrative, kinetic poetry, and recombinant and computer-generated texts. Collaboration encouraged. Work sample (writing, programming, website) due on first day of semester. Enrollment limited to 17. Instructor permission required. Enrollment limited to 17. S/NC. WRIT

- **Fall** LITR0210D S01 10646 M 4:00-6:20(13)
- **Spr** LITR0210D S01 20506 M 4:00-6:20(16)

**0210E Screenwriting II**
Emphasis is placed on filmic devices, such as dialogue, voice-over, montages and time. Writing includes frequent exercises. See general course description above for course entry procedures for all intermediate workshops. This course is limited to undergraduates. Enrollment limited to 17. Instructor permission required. S/NC. WRIT

- **Spr** LITR0210E S01 26212 F 3:00-5:20(15)

**0310 Creative Writing Special Topics Workshop**
Workshops provide students with a forum for the practice of the art of writing within the context of a special topic that may focus on a particular genre or cross the boundaries of genre. Students must submit a separate writing sample for each section to which they wish to apply. Samples are due the first class meeting. Permission will be issued by the instructor after the manuscripts have been reviewed. A student may take LITR 0310 up to six times for credit, but may not repeat a particular special topic. Enrollment limited to 17. WRIT

**0310D Imagining the City: Visions from Film and Literature**
This course will look at representations of urban space both in films and fiction, and through the lens of critical writings on the intersections between city space, architecture, film, and narrative. How do critics affect us aesthetically and emotionally? How have film and fiction examined, reinvented and revolutionized urban space in the twentieth century? What is the future of cities? These are some of the questions we'll address through readings, screenings, and discussion. As a class we will do weekly creative writing exercises inspired by the films and designed to explore the ways in which poetic space might be evoked through text.

- **Sum** LITR0310D S01 60356 TTh 1:30-5:30

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
0510 First Year Literary Seminars
Literature seminar courses designed for first-year undergraduate students. Each session will have its own special topic. Enrollment limited to 20. FYS

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, Redonnet, Fritz Lang, Chaplin, Tati. Enrollment limited to 20 first year students. FYS

0610 First Year Special Topics Workshops
Special topics workshop courses designed for first-year undergraduate students. Each session will have its own special topic. FYS. Enrollment limited to 12. Reserved for first-year students. S/NC required.

0610C Books By Hand
We shall explore small press publishing and bookmaking from historical, contemporary and hands-on perspectives. Students will be asked to design and carry out small creative projects throughout the semester as well as research particular concerns in the field. Enrollment limited to 12 first year students. S/NC WRIT

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

1010 Advanced Creative Writing Workshops
Workshops provide students with a forum for extended practice of the art of writing. Intermediate workshop in respective genre is desirable but not required. Students must submit a separate writing sample for each section to which they apply. All writing samples are due at 68-1/2 Brown Street on the first day of the semester. Permission will be issued by the instructor after the manuscripts have been reviewed. A student may take LITR 1010 up to six times for credit, but no more than three sections may be in one genre or interdisciplinary area. WRIT

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. Enrollment limited to 12. S/NC WRIT

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 Enrollment limited to 12.

1010D Advanced Electronic Writing
An advanced experimental workshop in writing for digital media. Students should have some experience of working with computer-based authoring tools for generating content. Writing for digital media is taken to mean any writing for which electronic supports are vital: to its literary aesthetic, to its cultural viability as (potential) literary art. The primary aim of the course is to produce a work of writing in digital media, but associated readings and discussion will draw out the problems associated with this contemporary challenge to traditional practices. Prerequisite one of the following: LITR 0210D, 1010A, 1010B, 1010C, 1010E, 1010G (or related experience). Enrollment limited to 12. Instructor permission required. S/NC. WRIT

1010F Advanced Translation
This translation workshop will focus on translating poetry texts from English to English; and then poems from another language (with which the student has facility) to an English version. Writing samples due on first day of the semester. Written permission required. S/NC. WRIT

1010G Cave Writing
An advanced experimental workshop for writing in immersive 3D - at the cutting edge of new media - introducing text, sound, spatial poetics, and narrative movement into Brown's "Cave" at its Center for Computation and Visualization. An easy-to-learn and easy-to-use application allows non-programmers to create projects on their laptops and then to run them in the Cave 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. Instructor permission required. Enrollment limited to 12. S/NC. WRIT

1110 Advanced Creative Writing Special Topics Workshops
Workshops provide students with a forum for extended practice of the art of writing within the context of a special topic that may focus on a particular genre or cross the boundaries of genre. Students must submit a separate writing sample for each section to which they wish to apply. All writing samples are due at 68-1/2 Brown Street on the first day of the semester. Permission will be issued by the instructor after the manuscripts have been reviewed. A student may take LITR 1110 up to six times for credit, but may not repeat a particular special topic. S/NC WRIT

1110F Narrative Strategies
A course essentially geared to the creative and critical writer interested in experimenting with some of the narrative structures suggested by the great films. To include films of Akerman, Antonioni, Eisenstein, Hou Hsiao, Hsien, Goddard, marker, Tarkovsky and others and texts by Duras, Sebald and Vittorini. Instructor permission required. Instructor's permission required. WRIT

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. Instructor's permission required. WRIT

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
**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  10692  TT 2:30-3:50(11)  (B. Evenson)

Spring  LITR1200  S01  26400  TT 2:30-3:50(11)  (C. Wright)

**1230 Seminars in Reading, Research, and Writing about Literature**

Designed for students who have an interest in reading, researching and writing about literature, in a seminar environment, under the instruction of a practitioner in the discipline. Students may repeat courses provided that the topics are different. Enrollment limited to 20.

Fall  LITR1230C  S01  25529  W 3:00-5:20(14)  (F. Gander)

**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.

Spring  LITR1230E  S01  26401  TTh 10:30-11:50(09)  (M. Harper)

**1230G Master Poets of Apartheid Streets: Sterling Brown, Robert Hayden, Margaret Walker, Gwendolyn Brooks**

With the theme of "Slavery and Justice" in recent Brown University review, [4] "Master Poets of Apartheid Streets: Perpetual Resistance against de jure and de facto Segregation" is the formal and precise embouchure as Critical Realism which legislates as antidote to pernicious social, economic and educational racism: the aesthetic and referential stance of this seminar is "An Integer Is a Whole Number." Through close attention to the conventions of poetry as praxis by these four master poets, in social context, the modality of this study is poetic discourse (what Frederick Douglass called "a sacred effort" in Douglass' description of President A. Lincoln's "Second Inaugural." Peripheral insights will be provided by Brown University researchers of three dissertations, and James R. Patterson's most recent book on "Brown v. Board of Education." Written permission required. Enrollment limited to 20. S/NC.

Fall  LITR1230G  S01  15716  Th 4:00-6:20(13)  (M. Harper)

**1230I The Documentary Vision in Recent American Literature**

A study of genre-defiant works from Holocaust to what it means to be avant-garde including lyric treatments of "the cruel radiance of what is." The syllabus proposes examples responsive to current exigencies and those that offer vigorous, imperfect models whereby language and form are primary; the hidden news is centrally positioned in art. The literary text will form the ground, but final projects may be composed of "fragments of cloth, bits of cotton, lumps of earth, records of speech, pieces of wood and iron, phials of odors, plates of food... a piece of the body torn out by the roots." Enrollment limited to 20.

Fall  LITR1230I  S01  16658  M 3:00-5:20(13)  (C. Wright)

**1230J Writing: Material Differences**

A study of various directors' attempts to transfer masterpieces of fiction into film. Concerning both genres we will ask Gertrude Stein's question: What are masterpieces, and why are there so few of them? Includes fiction by Austen, Bierce, Carter, Cowley, Doyle, Faulkner, Forster, Fowles, Kesey, Joyce, McCullers, Morrison, Nabokov, O'Connor, Thompson, Walker, Spielberg, Woolf, Yamamoto and directed by Burton, Forman, Felini, Gilliam, Huston, Jordan, Kurasawa, Lee, Potter, and others. Class and weekly screenings. Enrollment limited to 12. S/NC WRIT Students MUST register for a filming/screening, and a lecture section. Instructor's permission required. WRIT

Fall  LITR1110S  S01  14104  T 10:30-12:50(09)  (M. Steinbach)

**1150 Special Topics Workshop/Seminar in Literary Arts**

Special topics workshop/seminars combine elements of the writing workshop with elements of a seminar on literary issues. Courses under this rubric will require students to read, discuss and write creative and critical work. Students must submit a separate writing sample for each section to which they wish to apply. The writing sample is due at the first class session. Permission will be issued by the instructor after the manuscripts have been reviewed. Enrollment limited to 12. WRIT

Fall  LITR1150A  S01  16656  M 3:00-5:20(13)  (T. Field)

**1150B The Foreign Home: Interdisciplinary Arts**

Project-centered workshop for exploration beyond one's "home" genre, whether in video, poetry, fiction, music, performance or visual arts. A study of various directors' attempts to transfer masterpieces of fiction into film. Concerning both genres we will ask Gertrude Stein's question: What are masterpieces, and why are there so few of them? Includes fiction by Austen, Bierce, Carter, Cowley, Doyle, Faulkner, Forster, Fowles, Kesey, Joyce, McCullers, Morrison, Nabokov, O'Connor, Thompson, Walker, Spielberg, Woolf, Yamamoto and directed by Burton, Forman, Felini, Gilliam, Huston, Jordan, Kurasawa, Lee, Potter, and others. Class and weekly screenings. Enrollment limited to 12. S/NC WRIT Students MUST register for a filming/screening, and a lecture section. Instructor's permission required. WRIT

Fall  LITR1150B  S01  26399  M 3:00-5:20(13)  (T. Field)

**1150H Latin-American Poetry Live!**

Students will read (in translation and, if possible, in Spanish), analyze, discuss and write essays about contemporary Latin American poets such as Cecilia Vicuña (Chile), Homero Aridjis (Mexico), Maria Negroni (Argentina), Jaime Saenz (Bolivia), et. al. Particular attention will be paid to how styles, themes, and geographies might be related. Although no Spanish is necessary, students will be encouraged (sometimes in pairs) to try translations and to write about the process. This section does not require permission from instructor. WRIT

Fall  LITR1150H  S01  16657  W 3:00-5:20(14)  (F. Gander)

**1150Y Fiction Through Poetry**

This course is designed for poets, fiction writers, and cross-genre enthusiasts interested in looking at narrative as it occurs at the level of the sentence, even the level of the word. We will use a variety of poetic texts as well as other fractured content as means to think about fiction, and the bordersland of storytelling. Instructor permission required (bring a writing sample to the first class meeting). Enrollment limited to 12. S/NC WRIT

Spr  LITR1150Y  S01  26774  M 3:00-5:20(13)  (A. Gledman)
An exploration of practices that make a material difference to writing, that may change what writing is in specific cultural circumstance and locations. We will look for such differences through transcultural and translingual experiments with writing, beginning "West" and moving "East." We will engage with a selection of widely divergent writers and genres, with emphases on poetics - particularly a translated rendition of Chinese poetics (such as was taken up by Pound and became influential in English literature) - and on theories that we can use for our practice, from: Fenollosa, Foucault, Derrida, and others.

Enrollment limited to 20. DVPS

1230N Robert Coover -- Foremost Storyteller

We shall examine the works of contemporary American fiction writer, Robert Coover. During his long, celebrated career, Coover has imaginatively responded to writers and forms that have come before him. We'll investigate how Coover appropriates earlier traditions and think about how he simultaneously preserves and subverts literary traditions. We shall consider such concepts as myth, religion, and authorial strategies and themes explored. Furthermore, we'll define literary terminology as a tools for textual and critical analysis. Finally, through this experience you can develop or refine the capacity for self-expression and communication. Enrollment limited to 20. WRIT

Sum LITR1230N S01 60440 MWF 9:00-11:40 (E. Bell)

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. Instructor’s permission required.

Fall; Spr

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. Instructor’s permission required.

Fall; Spr

1410 Honors Workshops in Creative Writing

Workshops provide a forum for students working on their theses or capstone projects. See instructor for permission during the semester before undertaking the course. S/NC. Enrollment limited to 12.

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.

Spr LITR1410A S01 23308 Th 12:00-2:20(10) (M. Steinbach)

1510 Honors Independent Study in Creative Writing

Provides tutorial instruction for students completing their theses or capstone projects. Typically taken by honors or capstone candidates in their final semester. See instructor to seek permission during the semester before undertaking the course of study. S/NC.

Fall; Spr

(Primarily for Graduates)

2010 Graduate Workshops in Literary Arts

Graduate-level practice of the art: writing workshops, ordinarily limited to graduate students in Literary Arts, with emphasis on a better understanding of creative process, strategies and forms. A student may take LITR 2010 up to six times for credit, but no more three sections may be in one genre or interdisciplinary area.

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.

Fall LITR2010A S01 10693 W 12:00-2:20(12) (T. Field)
Spr LITR2010A S01 20546 F 12:00-2:20(05) (C. Maso)

2010B Graduate Poetry

Advanced practice of the art: a writing seminar, limited to graduate students in Literary Arts. Emphasis is placed on developing a better understanding of the creative process, strategies and forms. Written permission required. S/NC.

Fall LITR2010B S01 10694 M 12:00-2:20(12) (F. Gander)
Spr LITR2010B S01 20547 W 12:00-2:20(05)

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. Instructor’s permission required.

Fall, Spr

2310 Graduate Independent Studies in Literary Writing

Offers tutorial instruction oriented toward some significant work in progress by the graduate student. S/NC. Instructor’s permission required.

Fall, Spr

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. Instructor’s permission required.

Fall, Spr

2600 Seminar in Teaching Creative Writing

A course focused on how to design and lead a creative writing workshop. Reading, writing and laboratory workshop sessions. Designed for first-year Literary Arts graduate students. S/NC.

Fall LITR2600 S01 14106 Th 12:00-2:20(10) (P. Nelson)

Mathematics

(Primarily for Undergraduates)

0050 Analytic Geometry and Calculus

MATH 0050 and 0060 provide a slower-paced introduction to calculus for students who require additional preparation. Presents the same calculus topics as MATH 0090, together with a review of the necessary precalculus topics. Students successfully completing this sequence are prepared for MATH 0100. Prerequisite: for MATH 0050 is written permission; for MATH 0060 is MATH 0050 or written permission. S/NC only.

Fall MATH0050 S01 11953 MWF 9:00-9:50(02)

0060 Analytic Geometry and Calculus

A slower-paced introduction to calculus for students who require additional preparation. Presents the same calculus topics as MATH 0090, together with a review of the necessary precalculus topics. Students successfully completing this sequence are prepared for MATH 0100. Prerequisite: for MATH 0050 is written permission; for MATH 0060 is MATH 0050 or written permission. S/NC only.

Spr MATH0060 S01 21401 MWF 9:00-9:50(02)

0070 Calculus with Applications to Social Science

A one-semester survey of calculus for students who wish to learn the basics of calculus for application to social sciences or for cultural

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
appreciation as part of a broader education. Topics include functions, equations, graphs, exponential and logarithmic, and differentiation and integration; applications such as marginal analysis, growth and decay, optimization, and elementary differential equations. May not be taken for credit in addition to MATH 0990. S/NC only.

Fall  MATH0070  S01  16814  TTh 9:00-10:20(08)  (A. Landman)

0090 Introductory Calculus, Part I
An intensive course in calculus of one variable including limits, differentiation, maxima and minima, the chain rule, rational functions, trigonometric functions, and exponential functions. Introduction to integration with applications to area and volumes of revolution. MATH 0090 and 0100 or the equivalent are recommended for all students intending to concentrate in the sciences or mathematics. Lectures plus one 80-minute section arranged. S/NC only. Students MUST register for a conference, and a lecture section.

Sum  MATH0090  S01  60415  MTWTh 1:00-3:00  (D. Wiygul)
Fall  MATH0090  S01  11955  MWF 9:00-9:50(17)
Fall  MATH0090  S02  12127  MWF 12:00-12:50(17)
Fall  MATH0090  S03  12132  MWF 2:00-2:50(17)  (A. Vagharshakyan)
Fall  MATH0090  S04  12135  TTh 10:30-11:50(17)  (A. Landman)
Fall  MATH0090  S05  14329  MWF 10:00-10:50(17)  (G. Daskalopoulos)
Spr  MATH0090  S01  21549  TTh 1:00-2:20(17)  (A. Landman)
Spr  MATH0090  S02  26563  MWF 9:00-9:50(17)

0100 Introductory Calculus, Part II
A continuation of the material of MATH 0090 including further development of integration, inverse trigonometric and logarithmic functions, techniques of integration, and applications. Other topics include infinite series, power series, Taylor's formula, introduction to differential equations, and numerical methods. MATH 0090 and 0100 or the equivalent are recommended for all students intending to concentrate in the sciences or mathematics. Lectures plus one 80-minute section arranged. Students MUST register for a conference, and a lecture section.

Sum  MATH0100  S01  60431  MTWTh 10:45-12:20  Fall  MATH0100  S01  11957  MWF 9:00-9:50(17)
Fall  MATH0100  S01  12154  MWF 10:00-10:50(17)  (D. Abramovich)
Fall  MATH0100  S02  12165  MWF 11:00-11:50(17)  (W. Gillam)
Fall  MATH0100  S03  12166  MWF 12:00-12:50(17)
Fall  MATH0100  S04  15016  MWF 2:00-2:50(17)
Spr  MATH0100  S01  21547  MWF 10:00-10:50(17)
Spr  MATH0100  S02  21551  MWF 12:00-12:50(17)
Spr  MATH0100  S03  21552  TTh 9:00-10:20(17)  (A. Landman)
Spr  MATH0100  S04  21553  TTh 2:30-3:50(17)  (R. Schwartz)

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  11956  MWF 9:00-9:50(17)
Fall  MATH0170  S02  12168  MWF 12:00-12:50(17)
Fall  MATH0170  S03  12169  MWF 1:00-1:50(17)  (C. Kottke)
Fall  MATH0170  S04  12170  MWF 2:00-2:50(17)  (M. Vuletic)
Fall  MATH0170  S05  12171  TTh 1:00-2:20(17)  (J. Kutluhan)

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  11958  MWF 2:00-2:50 & T 12:00-12:50(17)
Fall  MATH0180  S02  12173  MWF 1:00-1:50 & T 12:00-12:50(17)

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. Recommended prerequisite: MATH 0100, 0170, or 0190.

Sum  MATH0200  S01  60438  ‘To Be Arranged’
Fall  MATH0200  S01  11960  MWF 11:00-11:50 & Th 12:00-12:50(17)
Fall  MATH0200  S02  21777  MWF 12:00-12:50 & Th 12:00-12:50(17)
Fall  MATH0200  S03  13582  TTh 2:30-3:50 & Th 12:00-12:50 (17)  (A. Bravermann)
Spr  MATH0200  S01  21558  MWF 1:00-1:50 & Th 12:00-12:50(17)
Spr  MATH0200  S02  24311  MWF 2:00-2:50 & Th 12:00-12:50(17)
Spr  MATH0200  S03  21599  TTh 1:00-2:20 & Th 12:00-12:50 (17)  (S. Lichtenbaum)

0350 Honors Calculus
A third-semester calculus course for students of greater aptitude and motivation. Topics include vector analysis, multiple integration, partial differentiation, line integrals, Green's theorem, Stokes' theorem, the divergence theorem, and additional material selected by the instructor. Prerequisite: Advanced placement or written permission.

Fall  MATH0350  S01  11961  MWF 10:00-11:50(17)  (A. Vagharshakyan)
Fall  MATH0350  S02  12180  TTh 1:00-2:20(17)  (R. Kenyon)

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  21403  TTh 2:30-3:50(17)

0520 Linear Algebra
Vector spaces, linear transformations, matrices, systems of linear equations, bases, projections, rotations, determinants, and inner
products. Applications may include differential equations, difference equations, least squares approximations, and models in economics and in biological and physical sciences. MATH 0520 or 0540 is a prerequisite for all 1000-level courses in Mathematics except MATH 1260 or 1610. Recommended prerequisite: MATH 0180, 0200, or 0350. May not be taken in addition to MATH 0540.

Fall MATH0520 S01 11962 MWF 2:00-2:50(17) (B. Viray)
Fall MATH0520 S02 12183 MWF 11:00-11:50(17) (M. Vuletic)
Spr MATH0520 S01 21564 MWF 10:00-10:50(17)
Spr MATH0520 S02 21565 MWF 11:00-11:50(17) (S. Treil)
Spr MATH0520 S03 21566 MWF 2:00-2:50(17)
Spr MATH0520 S04 21567 MWF 1:00-1:50(17)

0540 Honors Linear Algebra
Linear algebra for students of greater aptitude and motivation, especially mathematics and science concentrators with a good mathematical preparation. Matrices, linear equations, determinants, and eigenvalues; vector spaces and linear transformations; inner products; Hermitian, orthogonal, and unitary matrices; and Jordan normal forms. Provides a more extensive treatment of the topics in MATH 0520. Recommended prerequisites: MATH 0180, 0200, or 0350.

Fall MATH0540 S01 11964 TTh 2:30-3:50(17) (T. Banchoff)
Spr MATH0540 S01 21568 MWF 11:00-11:50(17) (H. Oh)
Spr MATH0540 S02 21569 MWF 1:00-1:50(17) (W. Gillam)

0580 Mathematical Forms in Architecture
This project will explore and advance innovative applications of mathematics to architecture using computational methods. Historically, architecture has been guided primarily by an intuitive creative process. In contrast to the end-results of intuitive design, many "optimal" forms--i.e. geometric shapes and configurations that satisfy extremal conditions--are unique because they are the result of systematic physical experiments or explicit mathematical study in addition to imaginative input. Classic questions for which human intuition alone has been incapable of finding a solution include: What is the exact shape of the optimal arch?, or What is the shape of a child's slide that minimizes the time of travel? The use of computational methods to generate solutions to these problems will be made considerably simpler via optimization libraries in Mathematica. The application to architecture in this project will provide students a unique concrete backdrop to visualize solutions to these problems.

Sum MATH0580 S01 60295 TTh 9:00-1:00

(For Undergraduates and Graduates)

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 21404 TTh 10:30-11:50(09) (J. Kutluhan)

1040 Fundamental Problems of Geometry
Topics are chosen from euclidean, projective, and affine geometry. Highly recommended for students who are considering teaching high school mathematics. Prerequisites: MATH 0520, 0540, or instructor permission.
Spr MATH1040 S01 24445 MWF 2:00-2:50(07) (W. Gillam)

1060 Differential Geometry
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.
Prerequisite: MATH 0520 or MATH 0540.

Fall MATH1060 S01 11965 TTh 9:00-10:20(08) (H. Oh)

1110 Ordinary Differential Equations
Ordinary differential equations, including existence and uniqueness theorems and the theory of linear systems. Topics may also include stability theory, the study of singularities, and boundary value problems.
Prerequisite: MATH 0520 or MATH 0540.

Fall MATH1110 S01 11966 MWF 10:00-10:50(03) (J. Holmer)

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 21737 MWF 11:00-11:50(04) (A. Vagharshakyan)

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 11967 MWF 1:00-1:50(06) (S. Treil)

1140 Functions Of Several Variables
See Functions Of Several Variables (MATH 1130) for course description.
Prerequisite: MATH 1130 or instructor permission.
Spr MATH1140 S01 21405 MWF 10:00-10:50(03) (H. Oh)

1260 Complex Analysis
Examines one of the cornerstones of mathematics. Complex differentiability, Cauchy-Riemann differential equations, contour integration, residue calculus, harmonic functions, geometric properties of complex mappings. Prerequisite: MATH 0180, 0200, or 0350. This course does not require MATH 0520 or 0540.

Fall MATH1260 S01 13583 TTh 10:30-11:50(09) (J. Kutluhan)

1270 Topics in Functional Analysis
Infinite-dimensional vector spaces with applications to some or all of the following topics: Fourier series and integrals, distributions, differential equations, integral equations, calculus of variations.
Prerequisite: At least one 1000-level course in Mathematics or Applied Mathematics, or permission of the instructor.
Fall MATH1270 S01 15959 MWF 11:00-11:50(04) (B. Cole)

1410 Combinatorial Topology
Topology of Euclidean spaces, winding number and applications, knot theory, fundamental group and covering spaces. Euler characteristic, simplicial complexes, classification of two-dimensional manifolds, vector fields, the Poincaré-Hopf theorem, and introduction to three-dimensional topology.
Prerequisites: MATH 0520 or MATH 0540, or instructor permission.
Spr MATH1410 S01 23519 TTh 2:30-3:50(11) (T. Goodwillie)

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 11968 MWF 10:00-10:50(03) (B. Viray)
Spr MATH1530 S01 21570 MWF 10:00-10:50(03) (J. Holmer)

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 21408 TTh 1:00-2:20(10) (M. Rosen)

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 21410 TTh 10:30-11:50(09) (A. Braverman)

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 11969 MWF 11:00-11:50(04) (C. Kottke)

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 11970 TTh 10:30-11:50(09) (R. Kenyon)

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 21413 MWF 1:00-1:50(06) (M. Vuletic)

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.

Fall; Spr

(Primarily for Graduates)

2010 Differential Geometry
Introduction to differential geometry (differentiable manifolds, differential forms, tensor fields, homogeneous spaces, fiber bundles, connections, and Riemannian geometry), followed by selected topics in the field.

Fall MATH2010 S01 11973 'To Be Arranged' (R. Schwartz)

2050 Algebraic Geometry
Complex manifolds and algebraic varieties, sheaves and cohomology, vector bundles, Hodge theory, Kähler manifolds, vanishing theorems, the Kodaira embedding theorem, the Riemann-Roch theorem, and introduction to deformation theory.

Fall MATH2050 S01 11974 'To Be Arranged' (S. Lichtenbaum)

2060 Algebraic Geometry
See Algebraic Geometry (MATH 2050) for course description.

Spr MATH2060 S01 21415 'To Be Arranged' (S. Lichtenbaum)

2110 Introduction to Manifolds
Inverse function theorem, manifolds, bundles, Lie groups, flows and vector fields, tensors and differential forms, Sard's theorem and transversality, and further topics chosen by instructor.

Spr MATH2110 S01 21416 'To Be Arranged' (B. Cole)

2210 Real Function Theory
Point set topology, Lebesgue measure and integration, Lp spaces, Hilbert space, Banach spaces, differentiability, and applications.

Fall MATH2210 S01 16817 'To Be Arranged' (S. Treil)

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 26564 'To Be Arranged' (W. Strauss)

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 11979 'To Be Arranged' (T. Goodwillie)

2260 Complex Function Theory
See Complex Function Theory (MATH 2250) for course description.

Spr MATH2260 S01 21417 'To Be Arranged' (J. Holmer)

2370 Partial Differential Equations
Interested students must register for APMA 2230 S01 (CRN 15961).

2380 Partial Differential Equations
Interested students must register for APMA 2240 S01 (CRN 24289).

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 11980 'To Be Arranged' (J. Brock)

2420 Topology
See Topology (MATH 2410) for course description.

Spr MATH2420 S01 21418 'To Be Arranged' (C. Kottke)

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 11981 'To Be Arranged' (D. Abramovich)

2520 Algebra
See Algebra (MATH 2510) for course description.

Spr MATH2520 S01 21419 'To Be Arranged'

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 11996 'To Be Arranged' (J. Silverman)

2540 Number Theory
See Number Theory (MATH 2530) for course description.

Spr MATH2540 S01 21430 'To Be Arranged' (A. Braverman)

2630 Probability
Interested students must register for APMA 2630 S01 (CRN 11424).

2640 Probability
Interested students must register for APMA 2640 S01 (CRN 21024).

2970 Preliminary Exam Preparation
Fall MATH2970 S01 11997 'To Be Arranged'
Spr MATH2970 S01 21434 'To Be Arranged'

2980 Reading and Research
Independent research or course of study under the direction of a member of the faculty, which may include research for and preparation of a thesis. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall; Spr

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 12001 'To Be Arranged'
Spr MATH2990 S01 21435 'To Be Arranged'

Fall XLIST Courses of Interest to Graduate Students Majoring in Mathematics
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 2110 Real Analysis
APMA 2630 Probability

Spring XLIST Courses of Interest to Graduate Students Majoring in Mathematics
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 2120 Hilbert Spaces and Their Applications
APMA 2640 Probability

Medieval Studies

(Primarily for Undergraduates)

0210F Beowulf to Aphra Behn: The Earliest British Literatures (ENGL 0210F)
Interested students must register for ENGL 0210F S01 (CRN 26486).

0250E The Medieval King Arthur (ENGL 0250E)
Interested students must register for ENGL 0250E S01 (CRN 16756).

0360 Blood, Bones and Bodies: Medieval Perspectives
Medieval attitudes toward the body—whether profane or sacred, tortured or pleasured, monstrous or beautiful—were radically different from our own. So too was the sense of the boundary between death and life. The trial of a pope's cadaver, female bodies that became male through cross-dressing, the worship of saints' bones, fervent devotion to Christ's blood, diseases that unleashed God's wrath by killing one third of Europe's population, medical practices that relied on classical understandings of the body—these and other related topics form the subject of this course, which is team-taught by faculty from the Program in Medieval Studies.

Spr MDVL0360 S01 20124 TTh 2:30-3:50(11) (A. Remensnyder)

0660 The World of Byzantium (CLAS 0660)
Interested students must register for CLAS 0660 S01 (CRN 15953).

0990G Difficult Relations? Judaism and Christianity from the Middle Ages until the Present (JUDS 0990G)
Interested students must register for JUDS 0990G S01 (CRN 16743).

0990J Body and Society: Medicine and Medical Ethics in the Premodern World (JUDS 0990J)
Interested students must register for JUDS 0990J S01 (CRN 26475).

(For Undergraduates and Graduates)

1020 Living Together: Muslims, Christians, and Jews in Medieval Iberia (HIST 1020)
Interested students must register for HIST 1020 S01 (CRN 15481).

1110Q Greek Erotic Literature: From Plato to the Medieval Romances (GREK 1110Q)
Interested students must register for GREK 1110Q S01 (CRN 26612).

1120D Alcuin (LATN 1120D)
Interested students must register for LATN 1120D S01 (CRN 26618).

1120G The Idea of Self (CLAS 1120G)
Interested students must register for CLAS 1120G S01 (CRN 15507).

1310T Chaucer (ENGL 1310T)
Interested students must register for ENGL 1310T S01 (CRN 16765).

1410 The Talmud (JUDS 1410)
Interested students must register for JUDS 1410 S01 (CRN 26777).

1750L Erotic Desire in the Premodern Mediterranean (CLAS 1750L)
Interested students must register for CLAS 1750L S01 (CRN 25799).

1970 Independent Study
Tutorial instruction on an approved topic in Late Antique and/or Medieval cultures, supervised by a member of staff. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. May be repeated once for credit. Instructor's permission required.

Fall; Spr

1972H Sex, Power, and God: A Medieval Perspective (HIST 1972H)
Interested students must register for HIST 1972H S01 (CRN 16944).

1990 Honors Thesis
Independent research and writing on a topic of special interest to the student, under the direction of a faculty member. Required of candidates for honors. Permission should be obtained from the Director of the Program in Medieval Studies. Instructor's permission required.

Fall; Spr

Middle East Studies

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Modern Culture and Media

(Primarily for Undergraduates)

**0100 Introduction to Modern Culture and Media**
An introduction to key forms that constitute media in modern culture: photography, film, recorded sound, print, television, video, and digital media. We will examine the materials of such media, and produce critical accounts of them as representational forms as well as aesthetic, social, and/or political practices. Our discussions will be structured by major theoretical concepts and approaches. Students MUST register for the lecture section and the screening. A sign-up sheet will be available for conferences after the first class meeting. Open to undergraduates only. LILE

Fall MCM0100 S01 11299 MW 1:00-1:50(06) (P. Rosen)

**0150 Structuralism, Poststructuralism and their Others**
An introduction to the theoretical foundations of contemporary cultural criticism. We will study theories of language and representation, image and narrative, signification and textuality, fantasy and ideology, and modernity and postmodernity that are crucial to understanding modern culture and media texts (including literary, photographic, film, television, and digital media). Readings will range from such scholars as Saussure, Levi-Strauss, Marx, and Freud to Barthes, Fanon, Irigaray, and Butler. Students must register for both the lecture section and one conference; a sign-up sheet will be available for conferences after the first class meeting. Open to undergraduates only.

Spr MCM0150 S01 20952 MW 1:00-1:50(06) (E. Rooney)

**0230 Digital Media**
This course introduces students to the study of digital media. Moving from its popular mass forms to alternative artistic installations, from cyberpunk fiction and movies to facebook.com, we will study the aesthetics, politics, history and theory of digital media. Special attention will be paid to its relation to social/cultural formations (gender, sexuality, race, global flows). Students MUST register for the lecture section and the screening. A sign-up sheet will be available for conferences after the first class meeting.

Fall MCM0230 S01 16834 MW 11:00-11:50(04) (W. Chun)

**0710 Introduction to Filmmaking: 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. 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 15 will be determined after this meeting, with permission of the instructor. Enrollment limited to 15. S/NC.

Spr MCM0710 S01 21033 T 1:00-3:50(10) (L. Thornton)

**0730 Introduction to Video Production: Critical Strategies and Histories**
Provides the basic principles of video technology and independent video production through a cooperative, hands-on approach utilizing small format video (Mini DV). Emphasizes video as a critical intervention in social and visual arts contexts. 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. The final class list will be determined after this meeting, with permission of the instructor. Enrollment limited to 12. S/NC.

Spr MCM0730 S01 21041 Th 2:30-5:50(11) (A. Cokes)

**0750 Digital Art**
What would Andy Warhol's Facebook page look like? What would John Cage have done with an iPod? This introductory production course combines history, theory, and practice to explore the intersection of art and emerging digital technologies. Examples of recent student work include a dance performance lit by cell phones, a Dadaist video game, and an exquisite corpse made with Processing, a programming language for artists. We will examine and critique new media projects by various artists, as well as art historical precursors/fluences. Students give presentations and produce media art projects. Readings include Walter Benjamin, Hans Magnus Enzensberger, and Jean Baudrillard. Enrollment limited to 40. S/NC.

Fall MCM0750 S01 13759 T 1:00-3:50(10) (M. Tribe)

**0780 Soundtracks: Sound Production and Visual Media**
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 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 25416 M 10:00-12:50(03) (A. Cokes)

**0800 Freshman Seminars in Modern Culture and Media**
Enrollment Limited to 20 first year students. FYS

**0800H TV/Not TV: Theory and Production**
This freshman seminar examines both commercial television and non-commercial media forms, considering the dialogue and/or tensions between them. What are the critical potentials and political stakes of viewing TV and of making independent media? How can we re-write TV's cultural codes by stimulating alternative readings, fostering new interpretive practices, creating different texts, or developing diverse modes and sites of distribution? Combining theory and practice (media studies, televisual and anti-televisual screenings, and simple production assignments using available technologies), this course encourages students to read and critique commercial television through both analysis and their own creative media practices. Enrollment limited to 20 first year students. FYS

Fall MCM0800H S01 16844 Th 4:00-6:20(13) (L. Joyrich)

**0800I Victim Testimonies**
This seminar will explore primarily first person narratives and historical and other accounts that seek to recreate victim's voices (of the Jewish...
Holocaust, Stalin's terror, the Algerian War, the Rwandan genocide) in order to understand the cultural contexts and narrative styles that fashion victims, shape readers' views of them, and lead us to take some more seriously than others. Enrollment limited to 20 first year students. FYS

Fall MCM0800I S01 17050 W 3:00-5:20(14) (C. Dean)

0900 Undergraduate Seminars in Modern Culture and Media
Topics vary from year to year and instructor to instructor. In each section, enrollment is limited to 20. Prerequisite: one previous MCM course (MCM 0100, 0150, 0230, 0240, 0250, 0260, 1110 or equivalent).

0901C Photography/Film/Art
Questions of the nature of the photographic image have come to the fore in some of the most exciting modern art, such as the work of Cindy Sherman and Andy Warhol. In particular, the question of how the photograph relates to film and history has generated important articulations in contemporary cinema. Focusing more on form than on content, we will privilege a reading of the Fantastic as an effect rather than a genre or a theme: specific attention will be given to the relationships between filmic texts, spectatorship and the production of meaning. Screenings will include popular Hollywood cinema as well as European and independent films. We will discuss works by directors such as Lynch, Nolan, Fincher, Spielberg, Gondry, Cronenberg and Haneke. Readings will range from literary theory and psychoanalysis to film theory and semiotics. Prerequisite: MCM 0100, 0150, 0230, 0240, 0250, 0260, or 1110. Enrollment limited to 20 undergraduates. WRTC

Fall MCM0901C S01 16845 T 4:00-6:20(13) (M. Noble-Olson)

0901D Film Comedy
What makes some films so funny? This course will investigate many different forms of film comedy—from slapstick physical gags involving hapless men and umbrella-wielding matrons, to eccentric verbal banter, to parodies that subvert state politics using puppet characters. Instead of treating film comedy as "just mindless escapism," we will study how comedy's complex and slippery devices are central to the history of cinema. Readings in critical discussions about comedy, film history and film theory, e.g. Freud, Bergson, Benjamin, Barthes, and Krauss. Prerequisite: MCM 0100, 0150, 0230, 0240, 0250, 0260, or 1110. Enrollment limited to 20 undergraduates. WRTC

Spr MCM0901D S01 26603 TTh 10:30-11:50(09) (M. Hennefeld)

0901E The Fantastic in Contemporary Cinema
This course addresses the idea of the Fantastic from its definition to its articulations in contemporary cinema. Focusing more on form than on content, we will privilege a reading of the Fantastic as an effect rather than a genre or a theme: specific attention will be given to the relationships between filmic texts, spectatorship and the production of meaning. Screenings will include popular Hollywood cinema as well as European and independent films. We will discuss works by directors such as Lynch, Nolan, Fincher, Spielberg, Gondry, Cronenberg and Haneke. Readings will range from literary theory and psychoanalysis to film theory and semiotics. Prerequisite: MCM 0100, 0150, 0230, 0240, 0250, 0260, or 1110. Enrollment limited to 20 undergraduates.

Spr MCM0901E S01 26604 T 4:00-6:20(16) (M. Resmini)

(For Undergraduates and Graduates)

1200 Special Topics in Modern Culture and Media
Topics vary from year to year and instructor to instructor. In each section, enrollment is limited to 50. Written permission given after the first meeting. Prerequisite: one previous Modern Culture and Media course.

1201C Imagined Networks, Glocal Connections
This course examines emergent "imagined networks" (anti-globalization activists, youtubers, second lifers, NGOs) fostered by new media technologies and applications. Emphasis will be placed on understanding the changing relationship between the local and the global, and how "glocal" phenomena affect national and personal identities. Readings will be theoretical, historical, political and literary. Enrollment limited to 50 sophomores, juniors, and seniors. Prerequisite - one of the following: MCM 0100, MCM 0150, MCM 0230, MCM 0240, MCM 0250, MCM 0260, MCM 1110.

Fall MCM1201C S01 16840 TTh 10:30-11:50(09) (W. Chun)

1201K Queer Relations: Aesthetics and Sexuality (ENGL 1900R)
Interested students must register for ENGL 1900R S01 (CRN 16779).

1201W Modernity, Italian Style (ITAL 1030A)
Interested students must register for ITAL 1030A S01 (CRN 16787).

1201X Global Media: History, Theory, Production (INTL 1800N)
Interested students must register for INTL 1800N S01 (CRN 20444).

1201Y Reading Michel Foucault
This course will explore Foucault's work and impact primarily through his own writings, but also by exploring the transformation his thought has effected on traditional ways of approaching state and society, the body, social discipline, and a number of other areas of study. In short, this course seeks to put his work in the context of ideas he meant to challenge and how those challenges have been met and incorporated in current thought about politics, society, and culture. We will follow Foucault's trajectory from what he termed "archaeology" to "genealogy." Prerequisites: MCM 0100, 0150, 0230, 0240, 0250, 0260 or 1110. Enrollment limited to 50 Sophomores, Juniors and Seniors.

Fall MCM1201Y S01 17158 TTh 2:30-3:50(11) (C. Dean)

1201Z On Being Bored (ENGL 1511L)
Interested students must register for ENGL 1511L S01 (CRN 26580).

1202A The Poetics of Confession (ENGL 1561J)
Interested students must register for ENGL 1561J S01 (CRN 26582).

1202B Literature and Politics (ENGL 1900D)
Interested students must register for ENGL 1900D S01 (CRN 26519).

1202C Camera Works: The Theory and Fiction of Photography (ENGL 1900V)
Interested students must register for ENGL 1900V S01 (CRN 26589).

1500 Senior Seminars in Modern Culture and Media
Preference given to seniors in any of the MCM concentrations. In each section, enrollment is limited to 20. Written permission will be given after the first meeting. Prerequisite: two Modern Culture and Media courses.

1503D W. G. Sebald and Some Interlocutors (ENGL 1761Q)
Interested students must register for ENGL 1761Q S01 (CRN 26515).

1503E Aesthetic Theory/Cultural Studies
Aesthetic thought has a long and varied history, but aesthetic categories have only recently become a central concern of cultural studies. This course combines readings in the history of aesthetics and aesthetic education; twentieth-century work on aesthetics from various philosophical and disciplinary perspectives (from "aesthetic theory" and the "anti-aesthetic" to "a return to aesthetics"); and recent scholarship addressing (while not necessarily celebrating) the reemergence of aesthetic questions in cultural and media studies and the evolving relationship of the aesthetic to categories such as ideology, form and virtuality. Readings from Schiller and Kant to Adorno, Berube, Foster, Galloway, Ranciere and Spivak. Prerequisite: MCM 0100, 0150, 0230, 0240, 0250, 0260, or 1110. Enrollment limited to 20 juniors and seniors.

Fall MCM1503E S01 16846 W 12:00-2:20(12) (E. Rooney)

1503F Critical Methodologies: Contemporary Literary Theory (ENGL 1900)
Interested students must register for ENGL 1900I S01 (CRN 16778).
150 / Modern Culture and Media

1503G  Representations of Suffering in History and Media
This course will explore accounts of suffering in works on slavery, genocide, as well as extra-legal violence (lynching, gay bashing) in order to explore debates about the representation of violence and the use of new technologies of representation. Readings include historians, critical and legal theorists, and journalists. We will also explore recent debates around images of suffering and the reemergence of "shame" as a topic in the context of combatting violence and asserting identity in queer theory. Enrollment limited to 20 juniors, seniors and graduate students. Prerequisite: MCM 0100, 0150, 0230, 0240, 0250, 0260, or 1110, or instructor permission.
Spr MCM1503G S01 26773 F 9:30-11:50(03) (C. Dean)

1503H  Literature and the Ideology of the Aesthetic (ENGL 1950B)
Interested students must register for ENGL 1950B S01 (CRN 26963).

1700 Seminars in Production
Topics vary from year to year and instructor to instructor. In each section, enrollment is limited to 20. Written permission given after the first meeting.

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. A major project (10-20 minutes) and in-class presentations of work-in-progress required. Readings on the theory and practice of the form and selective 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. The final class list will be determined after this meeting, with permission of the instructor. Enrollment limited to 20. S/NC.
Fall MCM1700D S01 11462 M 3:00-6:50(13) (A. Cokes)

1700N  Open Source Culture
Where do we draw the line between sampling and stealing? What would it mean to call a urinal a work of art? This production seminar explores the tension between artistic appropriation and intellectual property law, considering open source software as a model for cultural production. We will trace a history of open source culture from Cubist collage and the Readymades of Marcel Duchamp through Pop art and found footage film to Hip Hop and movie trailer mashups. Students give presentations and produce media art projects. Readings include Roland Barthes, Nicholas Bourriaud, and Rosalind Krauss. Enrollment limited to 40. S/NC.
Spr MCM1700N S01 25767 W 10:00-1:50(03) (M. Tribe)

1700P  Radical Media
Walter Benjamin wrote that in the age of mechanical reproduction art ceases to be based on ritual and "begins to be based on another practice--politics." What is the relation between art and politics in an age of digital distribution? This course explores the nexus of media production and political action from the films of Sergei Eisenstein to WikiLeaks. Students give research-based presentations and produce media art projects. Readings include Guy Debord, Michel de Certeau, Hakim Bey. Enrollment limited to 40. S/NC.
Fall MCM1700P S01 16843 W 2:30-6:15(14) (M. Tribe)

1700R  The Art of Curating
It is sometimes said in contemporary art circles that curators are the new artists. Curating involves a wide range of activities, including research, selection, commissioning, collaboration with artists, presentation, interpretation, and critical writing. This production seminar considers curatorial practice as a form of cultural production, paying particular attention to questions of audience, ethical responsibility, and institutional context. Students give presentations, develop exhibition proposals, and curate exhibitions. Visiting curators present case-studies on recent projects. Readings include Douglas Crimp, Hans-Ulrich Obrist, and Nicholas Bourriaud. Enrollment limited to 40. S/NC
Spr MCM1700R S01 24029 T 1:00-3:50(10) (M. Tribe)

1700S  Narrative and Immersion
A production course examining the potentials for engagement in new media installations. The course draws on techniques of narrative to establish engagement in immersive environments. Students will be introduced to cinematic concepts, interactive technologies, multi-channel video and surround sound environments. Classes meetings will consist of viewing and analysis of exemplary work, discussion of readings, and critiques of student projects. An additional 1-hour technical workshop will be devoted to learning Jitter. Class members should have completed advanced work in film/video, digital sound, and/or creative writing. Open to upper-level undergraduates and graduate students. The final class list will be determined after the first class meeting, by permission of instructor. S/NC Students MUST register for a lab, and a lecture section.
Spr MCM1700S S01 24743 W 1:00-4:50(06) (L. Thornton)

1970  Directed Research: 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. Instructor's permission required.
Fall, Spr

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. Instructor's permission required.
Fall, Spr

(Primarily for Graduates)

2110E  The Reading Effect and the Persistence of Form (ENGL 2900M)
Interested students must register for ENGL 2900M S01 (CRN 26595).

2120  Studies in Media Theory
Enrollment limited to 20.

2120E  Cinema, Media Culture and Political Theory: Rancière and Others
There is a strand of contemporary thinkers concerned with political theory, in whose writings media and especially film play significant roles. Jacques Rancière has produced a major body of work on political theory, on aesthetics, and on film as well as media culture. This class will focus on a close examination of his political theory, his conceptions of film and media, and relations between the two fields in his writings. For comparison, we will also look at smaller samples of texts on political theory and film drawn from figures such as Agamben, Badiou, Jameson, etc. Enrollment limited to 20. This class is for Graduates only. Upperclass undergraduates require instructor permission.
Fall MCM2120E S01 17033 F 2:00-4:20 (P. Rosen)

2300E  Things Not Entirely Possessed: Romanticism and History (ENGL 2561B)
Interested students must register for ENGL 2561B S01 (CRN 16829).

2310  Studies in Textual Formations
Enrollment limited to 20.

2310I  At the Limits: Media Representation of the Holocaust
The Holocaust has been described as unimaginable, at the limits of representation. Yet there have been numerous attempts to imagine and represent it, across media (film, television, graphic novels), genres

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/wwkcsearch_public_P_Main).
(documentary, melodrama, comedy, fantasy), and modalities (through history and memory, "high" and "low" culture, fiction and nonfiction, reporting and marketing). Considering such attempts to represent the unrepresentable and mediate the immediacy of trauma, this course will explore media texts and theoretical/philosophical reflections on the Holocaust. Enrollment limited to 20. This course is for Graduates only. Upperclass undergraduates require instructor's permission.

Fall MCM2310I S01 17034 W 3:00-5:20(14) (L. Jourich)

2500 Studies in the History of Media Enrollment Limited to 20.

2500E Temporality in and the Cinema
An examination of the cinema's historical and theoretical position as a mode of representing time. Is time recorded or produced by film? How can we analyze duration in the cinema? What is the cinema's relation to the archive and to modernity? We will read work by Bergson, Freud, Marey, Kracauer, Benjamin, Deleuze, and others. Films by Lumière, Griffith, Snow, Tsai Ming-Liang, Hitchcock, and others. Enrollment limited to 20. This course is for Graduates only. Upperclass undergraduates require instructor's permission.

Spr MCM2500E S01 26785 Th 12:00-2:20(10) (M. Doane)

2510C The Adventures of Dignity
What is the ideological function of "dignity" as it is invoked in human rights discourses? What concepts of humankind and what fantasies of wholeness are assumed and reiterated? Readings include histories of human rights, treatises on dignity from Kant to Foucault, Elaine Scarry, and other theorists. Enrollment limited to 20. This class is for Graduates only. Upperclass undergraduates require instructor's permission.

Spr MCM2510C S01 26784 Th 4:00-6:20(16) (C. Dean)

2980 Independent Reading and Research in Modern Culture and Media
Individual reading and research for doctoral candidates. Not open to undergraduates. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Fall; Spr

2990 Thesis Preparation
No description available.

Fall MCM2990 S01 11581 "To Be Arranged"
Spr MCM2990 S01 21168 "To Be Arranged"

Modern Greek see Classics

Music

(Primarily for Undergraduates)

0010 Introduction to Western Music
A study a thousand years of music of Europe and America through CDs, DVDs, and YouTube. We'll explore how individuals, institutions, and societies create music, use it, experience it, pay for it, and control it. We'll discuss music and time, music and politics, music and identity. Still, the heart of the course is listening to great music, and learning how it works.

Fall MUSC0010 S01 16805 MWF 1:00-1:50(06) (D. Josephson)

0021 First Year Seminars
A seminar designed for students interested in music who are in their first year at Brown. No special musical background is required. All students welcome. In order to preserve an intimate environment for dialogue, and to promote active participation of all students, enrollment will be limited to 20. FYS

0021E Good Vibrations: The Music of Everyday Objects
This seminar will investigate the sonic properties of everyday objects and environments, and how they can transform into musical expression. Through a focus on listening and experimentation, the seminar will explore resonance, reverberation, field recording, feedback, circuit bending, archaeological acoustics, and other topics. Students will create individual and collaborative compositions and performance situations. No formal music background is required. Enrollment limited to 20 first year students. FYS LILE

Spr MUSC0021E S01 26548 TTh 2:30-3:50(11) (J. Rovan)

0021F Popular Music and Society in Latin America
This course examines the way that popular music shapes, and is shaped by, its social environment, with a special focus on twentieth-century Cuban and Brazilian styles. It introduces students to sociomusical analysis, by exploring the way that selected styles connect with the lived experiences of local audiences, the artistic and political goals that have motivated key performers, and the effect of their actions on broader regional debates. Issues covered include the way that musical styles become national symbols; music as a medium for social politics; and the roles of industrialization, migration, urbanization, and media dissemination in driving musical change. Enrollment limited to 20 first year students. FYS, DVPS, LILE.

Fall MUSC0021F S01 17161 MWF 10:00-10:50(03)

0021G Duke Ellington
This class will be an examination of the life and work of Duke Ellington. We will use recordings, scores, films, autobiographies, interviews, oral histories and other primary source materials as well as biographical, theoretical and analytical readings to study Ellington's three careers: the composer, the performer and the band leader. We will analyze his work largely within the musical parameters of form, improvisation techniques, orchestration, instrumentation, rhythm and chordal structures, and concepts of tone quality. Although musical literacy is not required for this course, students who so want may receive tutorials in the rudiments of theory and score reading. Enrollment limited to 20 first year students. FYS

Fall MUSC0021G S01 17052 Th 4:00-6:20(13) (M. McGarrell)

0040 World Music Cultures (Africa, America, Europe, Oceania)
A survey of a variety of musical styles from Africa, the Americas, Europe, and Oceania outside the Western art music tradition. Introduces these musics in their historical, social, and cultural context, in an attempt to understand them in their own theoretical systems and aesthetic frameworks.

Fall MUSC0040 S01 15618 MWF 2:00-2:50(07)

0052 Beethoven
A study of Beethoven's life and music.

Spr MUSC0052 S01 26549 TTh 10:30-11:50(09) (D. Josephson)

0060 Bluegrass, Country, and Old-Time Music
Folk songs, fiddle tunes, lined-out and shape-note hymnody, bluegrass, and country music, mainly in Appalachia and the South. Historical development, musical design, and how the musics construct working-class and regional identities, religious experience, gender, and rural values, with attention to commodification and the rise of the national country music industry.

Spr MUSC0060 S01 26550 TTh 1:00-2:20(10) (J. Titon)

0071 Opera
A study of opera from Monteverdi to the present. Also examines the concepts of opera as drama, the literary and dramatic scores for
0072 The History of Musical Theatre (TAPS 0960C)
Interested students must register for TAPS 0960C S01 (CRN 25585).

0075 Jazz and American Culture
Explores jazz in relation to American history, discussing how economics, war conditions regional differences and race relations shaped the music in its public reception. With readings from A. Baraka, L. Levine, R. Ellison, L. Erenberg, E. Lott, G. Early, S. DeVeaux and others, we address how jazz embodies social and political values or expresses national character. Open to non-musicians. Music proficiency preferred but not required. Enrollment limited to 60.

Fall MUSC0075 S01 16806 MWF 11:00-11:50(04)  (D. Gooley)

0200 Computers and Music
An introduction to the field of computer music, focusing on the use of electronics and computers in music and performance. Investigates basic acoustics, perception of sound, the history of music technology, and musical applications. Extensive listening assignments illustrate the impact of technology on popular and experimental genres. No prerequisites, though some experience with computers and some knowledge of music is very helpful. Significant hands-on experience with computer music systems. Enrollment limited to 80 students. Permission will be granted based on a questionnaire given in the first class, with preference given to lower-level students. Enrollment limited to 40. LILE

Fall MUSC0200 S01 15910 TTh 10:30-11:50(09)  (T. Winkler)

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. Instructor’s permission required.

Fall MUSC0220 S01 11663 W 7:00-9:50 PM(18)  (J. Rovan)

0221 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. Instructor’s permission required.

Spr MUSC0221 S01 22895 W 7:00-9:50 PM(18)  (J. Rovan)

0400 Introduction to Music Theory
An introduction to musical terms, elements, and techniques, including notation, intervals, scales and modes, triads and seventh chords, modulation, melody writing and harmonization, analysis, and composition. Ear-training and sight-singing are included. For students with some musical training.

Sum MUSC0400 S01 60296 MTWTh 1:00-3:00  (A. Cole)
Spr MUSC0400 S01 26812 MWF 10:00-10:50(03)

0455 Musical Theatre Songwriting (TAPS 0960A)
Interested students must register for TAPS 0960A S01 (CRN 15754).

0456 Musical Theatre Writing Workshop (TAPS 0960B)
Interested students must register for TAPS 0960B S01 (CRN 25584).

0510 Harmonic Convergence: Music’s Intersection with Science, Mathematics, History, and Literature
An examination of the connections between music and the brain, the creative process of music composition, and the application of musical form to literature. Readings by Levitin, Sacks, Hofstadter, Tolstoy, Mann, Burgess, and others, in which music plays an essential role. Students will examine music associated with these writings, including works by Bach, Mozart, Beethoven, Wolf, Debussy, Stravinsky, Schoenberg, and Shostakovich. Course goals: increased understanding of music and its relationship to other fields, and improved writing skills. While musical ability is not a prerequisite for this course, students with musical backgrounds will be encouraged to perform relevant works in class.

Sum MUSC0510 S01 60297 MWF 9:00-11:40  (P. Phillips)

0550 Theory of Tonal Music
For students with knowledge of the rudiments of music, including scales, intervals, and key signatures. Knowledge of keyboard strongly recommended. Prerequisite to the music concentration. Intensive study of tonal harmony, voice leading; analysis, ear training, sight-singing, keyboard exercises. A placement test will be administered on the first day of class in Orwig 315. Instructor permission required. MUSC 0550 is prerequisite to MUSC 0560. Students MUST register for a lab, and a lecture section.

Fall MUSC0550 S01 11666 TTh 1:00-2:20(10)  (J. Baker)
Fall MUSC0550 S02 11667 TTh 1:00-2:20(10)  (M. Steinbach)

0560 Theory of Tonal Music
See Theory Of Tonal Music (MUSC 0550) for course description. Prerequisite: MUSC 0550 or permission of the instructor. Students MUST register for a lab, and a lecture section.

Spr MUSC0560 S01 21271 TTh 1:00-2:20(10)  (P. Phillips)
Spr MUSC0560 S02 21272 TTh 1:00-2:20(10)  (M. Steinbach)

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. 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 MUSC0600 S01 11680 MW 6:30-8:20 PM(18)  (L. Jodry)

0601 Chorus
See Chorus (MUSC 0600) for course description.

Spr MUSC0601 S01 21275 MW 6:30-8:20 PM(18)  (L. Jodry)

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 11682 TTh 7:15-9:45 PM(12)  (P. Phillips)

0611 Orchestra
See Orchestra (MUSC 0610) for course description.

Spr MUSC0611 S01 21276 TTh 7:15-9:45 PM(12)  (P. Phillips)

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. Students will be notified of audition results within the first seven days of the semester. Restricted to skilled instrumentalists. Instructor permission required.

Fall MUSC0620 S01 11685 M 6:00-7:20 & W 6:00-8:20 PM(18)  (M. McGarrell)

0621 Wind Symphony
See Wind Symphony (MUSC 0620) for course description.

Spr MUSC0621 S01 21277 M 6:00-7:20 &
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 11688 M 7:30-8:50 PM & Th 6:10-7:20(12) (M. McGarrell)
Fall MUSC0630 S02 17099 T 8:00-9:20 PM(12) (M. McGarrell)
Fall MUSC0630 S03 17100 W 2:00-3:20(12) (M. McGarrell)
Fall MUSC0630 S04 17101 W 4:00-5:20(12) (M. McGarrell)

0631 Jazz Band
See Jazz Band (MUSC 0630) for course description.
Spr MUSC0631 S01 21278 M 7:30-8:50 PM & Th 6:10-7:20(12) (M. Obeng)
Spr MUSC0631 S02 26857 T 8:00-9:20 PM(12) (M. Obeng)
Spr MUSC0631 S03 26859 W 2:00-3:20(12) (M. Obeng)
Spr MUSC0631 S04 26860 W 4:00-5:20(12) (M. Obeng)

0640 Ghanaian Drummimg 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 11693 W 5:00-7:20(18) (M. Obeng)

0641 Ghanaian Drummimg 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 21279 W 5:00-7:20(18) (M. Obeng)

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 11699 T 6:00-8:50 PM(12) (I. Harjito)

0651 Javanese Gamelan
See Javanese Gamelan, MUSC0650, for course description. Enrollment limited to 18 students.
Spr MUSC0651 S01 21280 T 6:00-8:50 PM(12) (I. Harjito)

0660 Sacred Harp/Shape-Note Singing
Half credit each semester. Students will learn the traditional performance practices associated with the shape-note tunebook The Sacred Harp, a compilation of American vernacular hymnody first published in Georgia in 1844. This is an unaccompanied, four-part, participatory singing tradition. Ability to read Western music notation helpful but not required. No concert performances. No prerequisites. Repeatable for credit. S/NC.
Fall MUSC0660 S01 13226 Th 5:00-6:50(13) (K. Miller)

0661 Sacred Harp/Shape-Note Singing
Half credit each semester. Students will learn the traditional performance practices associated with the shape-note tunebook The Sacred Harp, a compilation of American vernacular hymnody first published in Georgia in 1844. This is an unaccompanied, four-part, participatory singing tradition. Ability to read Western music notation helpful but not required. No concert performances. No prerequisites. Repeatable for credit. S/NC.
Spr MUSC0661 S01 22597 Th 5:00-6:50(16) (K. Miller)

0670 Old-Time String Band
Half course each semester. Instruction and ensemble playing. Music taught by ear. American (southwestern Appalachian Mountain) traditional music on violin (fiddle), 5-string banjo, mandolin, and guitar. Enrollment limited to 20 students.
Fall MUSC0670 S01 11701 T 7:00-8:50 PM(12)

0671 Old-Time String Band
See Old-Time String Band (MUSC 0670) for course description. Enrollment limited to 20 students.
Spr MUSC0671 S01 21281 T 7:00-8:50 PM(12) (J. Titon)

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 11702 "To Be Arranged" (P. Phillips)

0681 Chamber Music Performance
See Chamber Music Performance (MUSC 0680) for course description.
Spr MUSC0681 S01 21282 "To Be Arranged" (P. Phillips)

0810 Applied Music Program: Instruction in Vocal or Instrumental Music
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. Instructor’s permission required.
Fall, Spr

0910 Medieval and Renaissance Music
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, andPalestrina. 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 26555 MW 11:00-11:50(04) (L. Jodry)

(For Undergraduates and Graduates)

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 11715 MW 2:00-2:50(07) (A. Cole)

1011 Advanced Musicianship II
Continuation of MUSC 1010. Prerequisite: MUSC 1010 or permission of the instructor.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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For complete, up-to-date course information please see the Brown Course Search tool ([https://selfservice.brown.edu/ss/hwwkcs/search_public_P_Main](https://selfservice.brown.edu/ss/hwwkcs/search_public_P_Main)).
Mozart wrote seven operas during his Vienna years. While we'll touch on all of them, the heart of this seminar will be his three Italian comic operas - The Marriage of Figaro, Don Giovanni, and Cosi fan tutte – and his German opera, The Magic Flute. We'll examine them as musical dramas, psychological studies, social documents, and sites for stage directors. We'll give special attention to Mozart's characterizations of women and the issues these raise for directors and singers. Work will include DVDs, CDs, readings, and scores for those who read music. Students will adopt an opera for the course.

Spr MUSC1640E S01 26791 TTh 2:30-3:50(11)  (D. Josephson)

1671 Conductors, Orchestras and Repertory
A study of conductors and the orchestras they directed, and an exploration of great musical compositions of the past 200 years. We will cover the evolving function and status of conductors from Arturo Toscanini and Wilhelm Furtwängler to Allan Gilbert and Gustavo Dudamel; orchestras from Berlin and Vienna to New York and Los Angeles; and music from Beethoven to Stravinsky. Our work will involve scores, CDs, DVDs, YouTube, memoirs, letters, and secondary sources. Each student will adopt two conductors and orchestras for the course. LILE

Fall MUSC1671 S01 17071 M 3:00-5:20(13)  (D. Josephson)

1690 Seminar in Jazz Studies
Surveys contemporary musicology, ethnomusicology, and cultural studies of jazz, combining music with analytical and ethnographic perspectives. Enrollment limited to 20.

1690A Miles Davis: An Evolution in Jazz
This seminar examines the life, music, and iconic status of Miles Davis, the most complex and varied figure in the history of jazz. From the mid-40s, when he emerged as a sideman to bebop virtuoso Charlie Parker, to his death in 1991, Davis was often on the cutting edge of jazz's evolution, spurring on the development of cool jazz, hard bop, progressive jazz, modal jazz, post-bop, and various forms of fusion. He was at the same a powerful though elusive personality who continues to inspire critical controversy. We will examine his creative evolution in the context of the history of popular music taste, race relations, gender roles, and social class in America. Readings include biographies, studies of his music, and collections of critical essays. There will be extensive listening assignments and occasional required video screenings. Enrollment limited to 20.

Spr MUSC1690A S01 26560 M 3:00-5:20(13)  (D. Gooley)

1710 Choral Conducting
An introduction to the art of conducting, with emphasis on choral training. A study of the relationship of gesture to sound will be combined with a survey of the choral repertoire, beginning with Gregorian Chant and continuing with renaissance motets, masses and madrigals. Baroque works with instruments, excerpts from Mozart's vespers, 19th-century Romantic part songs, and selected 20th-century. Issues of basic vocal production, warm-ups, rehearsal planning, editing, programming and concert production will also be included. Prerequisite: MUSC 0400 or 0550. Written permission required. May be repeated for credit.

Fall MUSC1710 S01 16812 W 3:00-5:20(14)  (L. Jodry)

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. Instructor's permission required.

Fall; Spr

1900 Introduction to Ethnomusicology
The study of people making music. Ethnographic research and writing on musical practices; history of ethnomusicology; musical case studies from around the world highlighting such issues as authenticity, tradition, commercialism, amateurism, postcolonial politics, and the ethics of fieldwork.

Spr MUSC1900 S01 24165 TTh 10:30-11:50(09)

1925 Musical Youth Cultures
A cross-cultural examination of music-oriented youth subcultures. Topics include youth-produced vs. youth-consumed music, club cultures, media technologies, online communities, minority and diaspora youth cultures, the mainstream vs. the underground, and ethnographic theory and method. This course requires critical engagement with a variety of popular music genres and cultures, encouraging students to examine their own musical production and consumption practices. Students will undertake individual ethnographic projects and will use web-based multimedia to present their findings. Some background in ethnomusicology, cultural anthropology, or media studies will be helpful (e.g., MUSC 1900, ANTH 0100, MCM 0100). Sophomore standing or instructor permission required. Enrollment limited to 25. DVPS

Fall MUSC1925 S01 17047 TTh 1:00-2:20(10)  (K. Miller)

1960 Advanced Ghanaian Drumming and Dancing Ensemble
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 11745 W 7:30-9:50 PM(18)  (M. Obeng)

1961 Advanced Ghanaian Drumming and Dancing Ensemble
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 21293 W 7:30-9:50 PM(18)  (M. Obeng)

1970 Individual Independent Study
Directed undergraduate research for advanced students. Prerequisite: permission of the instructor. Section numbers vary by instructor.

Fall; Spr

(Primarily for Graduates)

2010 Field Research in Ethnomusicology
Introduction to the theory and practice of fieldwork with people who make music. Project design, interviewing, still and video photography, recording, ethics, the researcher's roles, relations with human subjects, and strategies for documenting music in its human context. Prerequisite: Graduate standing or written permission.

Spr MUSC2010 S01 26561 W 12:20-2:50(06)  (J. Titon)

2080 Seminar in Ethnomusicology
An intensive study of a single topic in ethnomusicology.

2080B Ethnography of Popular Music
This seminar explores ethnographic work on popular music, including scholarship rooted in ethnomusicology, sociology, and performance studies. We will discuss case studies from around the world and will compare contemporary ethnographic research with other approaches.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).

156 / Philosophy

1. P01 0190  Contemporary Moral Problems
   A study of the techniques and principles of correct reasoning and effective communication. Topics may include deduction and induction, meaning and definition, fallacies in reasoning, the basic logic of propositions and predicates, and the essentials of inductive reasoning.
   Sum PHIL0100 S01 60301 TTh 1:30-5:30 (S. Aas)

2. P01 0101 Personal Identity
   What makes me the same person over time? How can we decide whether a person at a time is identical with a being alive at another time? We will consider the continuing existence of the body, the ability of the soul to continue when the body is destroyed, and the possibility of a physicalونعم
   Fall PHIL0111 S01 16804 TTh 2:30-3:50 (K. Dunlop)

3. P01 0010 The Place of Persons
   Some main philosophical problems about persons and their place in the world: the nature of persons and personal identity; mind and body; persons as free agents in a deterministic world; the subjectivity of personal values and the objectivity of moral requirements; the meaning of life. A main objective is to facilitate the student's own thinking about such issues. Instructor permission required. WRIT
   Spr PHIL0010 S01 25324 TTh 2:30-3:50 (D. Christensen)

4. P01 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?
   Fall PHIL0030 S01 13974 TTh 1:00-2:20 (F. Ackerman)

5. P01 0100 Critical Reasoning
   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 25762 T 1:00-3:50 (T. Winkler)

6. P02 2280 Designing-Large-Scale Multimedia Projects
   This seminar investigates "world music" as a contested term in ethnomusicology, a music-industry marketing category, and a college classroom subject. We will read critical accounts of the development and significance of the "world music" concept, compare several world music textbooks, experiment with teaching the exercises/assignments therein, and explore the scholarly literature on multiculturalist pedagogy. Prerequisite: graduate standing or written permission.
   Fall MUSC2080B S01 16815 F 3:00-5:20 (K. Miller)

7. P02 2290 Thesis Preparation
   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 25762 T 1:00-3:50 (T. Winkler)

8. P02 2970 Preliminary Examination Preparation
   Directed graduate research. Sections may vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.
   Fall MUSC2970 S01 11753 'To Be Arranged'
   Spr MUSC2970 S01 21295 'To Be Arranged'

9. P02 2990 Reading and Research
   Directed graduate research. Sections may vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.
   Fall MUSC2990 S01 11755 'To Be Arranged'
   Spr MUSC2990 S01 21296 'To Be Arranged'

Neuroscience see Biology and Medicine
An introduction to the practice of moral reasoning through consideration of issues of current moral controversy. We will address moral problems in the public sphere (famine relief, capital punishment, affirmative action) as well as the private sphere (abortion, sexuality, drugs). Emphasis is placed on identifying, evaluating, and constructing careful and well thought-out moral arguments. No prerequisites.

Fall PHIL0190 S01 16795 MWF 2:00-2:50(07) (D. Estlund)

0210 Science, Perception and Reality
It is implausible that scientific discoveries could make us give up commonsensical beliefs. It is even less plausible that commonsense could make us reject established scientific theories. So when science and commonsense appear to clash, as they do over colors, solidity, mental content, values, and death, serious philosophical problems arise. We will investigate possible responses to these problems.

Fall PHIL0210 S01 16796 MWF 11:00-11:50(04) (D. Kutach)

0350 Ancient Philosophy
We will discuss the ethics, epistemology, and metaphysics of the principal figures in ancient philosophy from the Presocratics to Aristotle. Emphasis is given to understanding the problems the philosophers were trying to solve and to assessing the arguments for their various positions. Primary readings are from the original sources in translation. WRIT

Fall PHIL0350 S01 14601 MWF 12:00-12:50(12) (M. Gill)

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. WRIT

Fall PHIL0360 S01 16797 MWF 10:00-10:50(03) (C. Larmore)

0400 Marxism
In the first part of the course, we will examine Marx’s economic, political, and philosophical writings, focusing on his analysis of capitalism, his critique of liberal democracy, and his theory of history. Then in the second part, we will look at some recent attempts to renew and extend the Marxist tradition.

Spr PHIL0400 S01 26536 TTh 9:00-10:20(08) (C. Larmore)

0500 Moral Philosophy
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.

Spr PHIL0500 S01 25332 MWF 1:00-1:50(06) (N. Arpaly)

0540 Logic
An introduction to perhaps the most fundamental tool of rational thought: deductive logic. Course begins with basic sentential logic, then moves on to deduction, quantification, and prediction. Argumentation and reasoning may also be addressed at times. No previous experience with logic or philosophy is required.

Fall PHIL0540 S01 13712 MWF 1:00-1:50(06) (J. Schechter)

0560 Political Philosophy
An analytic investigation of some central problems and topics in political philosophy, including political obligation and civil disobedience, liberty, rights, equality, and democracy. Readings are drawn from recent work in the field, along with a few classics.

Spr PHIL0560 S01 26537 MWF 11:00-11:50(04) (D. Estlund)

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. Enrollment limited to 20.

Spr PHIL0880 S01 25335 MWF 2:00-2:50(07) (F. Ackerman)

0990 Undergraduate Seminars
Seminars whose topics change annually. Enrollment in each seminar is limited to 20. Prerequisites are as noted.

0990M Descartes Meditations
This seminar will focus on the main arguments and overall goals of Decartes’ Meditations, read in conjunction with the Objections and Replies and some of Decartes’ other writings. Also discussed will be some philosophically engaging studies of the Meditations by contemporary writers such as Harry Frankfurt and Bernard Williams. Enrollment limited to 20.

Spr PHIL0990M S01 26699 T 12:00-2:20(10) (C. Larmore)

0990V Current Questions About Rational Belief
We’ll examine a number of issues concerning rational belief. Specific questions will include: What is the relationship between rational belief and logic? Is what’s rational for me to believe completely determined by my evidence? Does what’s rational for me to believe depend on my practical interests? Can I be rational in holding opinions that are denied by others who are seemingly as smart, unbiased, well-informed, etc., as I am? We’ll look at these questions from a couple of different perspectives, one which sees beliefs as all-or-nothing states (either one believes P or one doesn’t), and the other which sees belief as coming in degrees. Enrollment limited to 20 juniors and seniors.

Fall PHIL0990V S01 17200 M 3:00-5:20(13) (D. Christensen)

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 first year students. FYS

Fall PHIL0990X S01 17206 M 3:00-5:20(13) (J. Dreier)

0990Z Where Theory Meets Experience: French Philosophy of Science, 1900-1950
Philosophy of science was greatly influenced by the views of Henri Poincare and Pierre Duhem. We will read their works along with contemporaries such as Emile Meyerson and Gaston Bachelard. All readings will be in English. Prerequisite: one course in Philosophy, or instructor permission. Enrollment limited to 20 juniors and seniors.

Spr PHIL0990Z S01 26972 M 3:00-5:20(13) (K. Dunlop)

0991B Causation
This course will explore the relation between cause and effect from multiple perspectives. We will investigate how humans normally conceive of causation, how scientists investigate causality, how to apply judgments of causation in legal and moral situations, and what ultimately ties everything in the universe together. Enrollment limited to 20 juniors and seniors.

Spr PHIL0991B S01 26973 Th 4:00-6:20(16) (D. Kutach)

(For Undergraduates and Graduates)

1250 Aristotle

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
158 / Philosophy
A close study of Aristotle's major works: his metaphysics, philosophy of
nature, philosophy of mind, and ethics. Readings from original sources
(in translation) and contemporary secondary material. (Students
wishing to read the texts in the original Greek should make
arrangements with the instructor.)
Spr PHIL1250 S01 26538 TTh 6:30-7:50(12)  (M. Gill)

1280 History of Moral Philosophy
The course will focus on Aristotle and Kant, the two most influential
figures in the history of moral philosophy. We will examine their
principal ethical writings, seeking to evaluate the fundamental
similarities and differences in their understanding of moral life and of
the purposes of moral philosophy. Attention will also be given to some
contemporary treatments of the relations between Aristotle and Kant.
Fall PHIL1280 S01 16957 W 3:00-5:20(14)  (C. Larmore)

1300 Philosophy of Mathematics
An introduction to the philosophy of mathematics. Topics include the
nature of mathematical objects and the status of mathematical
knowledge. In the first part of the course, we will consider historically-
influential views, such as Formalism, Intuitionism, and Logicism. In the
second, we will consider contemporary views of mathematics, such as
Fictionalism, neo-Fregeanism, and Structuralism.
Fall PHIL1300 S01 16799 MWF 11:00-11:50(04)  (J. Schechter)

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. Half of the course deals
with Malory, the other half with contemporary American novels.
Fall PHIL1400 S01 13981 TTh 2:30-3:50(11)  (F. Ackerman)

1520 Consciousness
Topics will include: forms of consciousness, physicalist and
representationalist theories of qualia, pain and other bodily sensations,
emotional experience, conscious thought, higher order representation
theories of consciousness, self-representation theories, global
workspace theories, blindsight and related phenomena, and the roles
of attention and working memory in perceptual consciousness.
Enrollment Limited to 50. Not Open to: First Year Students.
Sophomores.
Fall PHIL1520 S01 10171 TTh 1:00-2:20(10)  (C. Hill)

1530 Experimental Philosophy
Experimental philosophy (X-phi) is the offspring of a marriage between
traditional conceptual analysis and scientific method. It investigates
intuitions about such traditional philosophical topics as free will, moral
responsibility, knowledge, and causation, but it does so systematically
and rigorously, by giving carefully worded questionnaires to samples
drawn from the general population, and subjecting the results to
statistical analysis. The samples may include but are not limited to
philosophers and philosophy students. Thus far X-phi has achieved
interesting results in moral philosophy, metaphysics, philosophy of
mind, and epistemology. The course will survey some of these results,
evaluate the current objections to X-phi, and provide some instruction
in the art of designing X-phi questionnaires. Open to juniors and
seniors.
Spr PHIL1530 S01 26547 MWF 12:00-12:50(05)  (C. Hill)

1550 Decision Theory: Foundations and Applications
Decision theory is a formal apparatus for analyzing preferences and
choices. Students learn the formal theory and then examine its
foundations and philosophical implications. Specific topics: the role of
causation in decision problems, the status of the axioms of the theory,
problems of infinite utility, rudimentary game theory, social choice
functions, utilitarianism as a theorem.
Spr PHIL1550 S01 26540 TTh 10:30-11:50(09)  (J. Dreier)

1590 Philosophy of Science
Examines philosophical issues concerning science such as
observational versus theoretical concepts, the nature of laws and
theories, the logic of scientific explanation, reduction of concepts and
theories, probability and confirmation, functional and teleological
analysis, scientific changes and revolutions, and the realist versus
irrealist interpretation of theories.
Spr PHIL1590 S01 23904 TTh 9:00-10:20(08)  (D. Christensen)

1600 Philosophy of Law
Philosophical examination of the chief classical and contemporary
theories of the nature and function of law. Topics include the
definition of law, the nature of legal systems, the logic of legal reasoning, the
analysis of basic legal conceptions (e.g., of right and duty), legal rules
and principles, law and justice, and law and morality.
Fall PHIL1600 S01 15543 MWF 12:00-12:50(12)  (D. Estlund)

1620 Philosophy of Quantum Mechanics
Course will analyze interpretations of non-relativistic quantum
mechanics like the Copenhagen interpretation, Everett's relative state
interpretation, the many-worlds/many-minds interpretations, GRW-type
collapse models, Bohm's interpretation, and various modal
interpretations. The focus will be the measurement problem, but we will
also discuss connections with mental states, the contextual nature of
measurement, non-locality and spacetime.
Spr PHIL1620 S01 26541 TTh 1:00-2:20(10)  (D. Kutach)

1630 Deductive Logic
This course provides a rigorous introduction to the metatheory of
classical first-order predicate logic. Topics covered include the syntax,
formal semantics, and proof theory of first-order logic, leading up to the
completeness theorem and its consequences (the compactness and
Lowenheim-Skolem theorems). Further topics may include modal logic,
the logic of conditionals, basic set theory, and epistemic logic. There
will be some discussion of philosophical issues, but the focus of the
course will be on the technical material.
Fall PHIL1630 S01 16800 MWF 10:00-10:50(03)  (R. Heck)

1640 The Nature of Morality
Investigates major theories and issues concerning the nature of moral
value. Readings from 20th-century authors. Issues include naturalism,
supervenience, moral motivation, subjectivity/objectivity of value,
skepticism, moral relativism, and moral realism.
Spr PHIL1640 S01 23684 TTh 2:30-3:50(11)  (J. Dreier)

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 16801 TTh 6:30-7:50(12)  (N. Arpaly)

1720 Kant: The Critique of Pure Reason
A detailed study of Kant's theoretical philosophy in the Critique of Pure
Reason, which we will read in its entirety alongside contemporary
secondary source material. Prerequisites: PHIL 0360, 1700, 1710 or
instructor permission.
Spr PHIL1720 S01 26543 MWF 1:00-1:50(06)  (K. Dunlop)

1750 Epistemology
This course provides a survey of central issues in contemporary epistemology. We will discuss the nature of knowledge, justification, and rationality. Topics include: difficulties with the traditional analysis of knowledge, skepticism about the external world, the nature of empirical justification, the problem of induction, and the epistemology of the a priori.

**1760 Philosophy of Language**

This course examines recent philosophical work in natural language semantics. The focus is on names and descriptions. We will consider which kinds of propositions sentences containing these terms express, and their truth conditions. We may also examine belief reports and vague terms, and other theoretical issues. Prerequisite: PHIL 0540 or 1630.

**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, the nature of mental representation, emotion and volition, the nature and possibility of a science of mind. Prerequisite: at least one course in philosophy (2 or more preferred) or a background in cognitive science.

**1820 Philosophy and Psychoanalysis**

The course proposes a philosophical examination of a variety of psychoanalytical theories beginning with classical Freudian theory and including ego psychology, various relational theories (object relations, intersubjectivity, and attachment theories), and self psychology. The course might also consider some of the philosophical sources of psychoanalytic theory, its interaction with recent developmental research, and its applications in literary and cultural studies.

**2030 Seminar**

**2030A Moral Psychology**

We all have our notions of good people, bad people, and ordinary people, but reality tends to defy these concepts. Many otherwise "nice", family loving, church going people voted for Hitler. The other hand, people with stupid or even evil views about morality sometimes turn out to be a lot better "in practice" than their smart counterparts who know Kant by heart. The same person may be very honest with her husband but very dishonest with IRS, brave in battle but scared of public speaking. In this class we shall explore this complexity, touching upon topics like rationality, free will, weak will, character, and love. We'll look at attempts by contemporary philosophers to find some method in the mess. Undergraduates require instructor permission to enroll.

**2100I Capitalism, Socialism, and Democracy**

In this course we will study questions of social justice through the frame of the differences between basic economic systems, concentrating especially on the rough distinction between socialist and capitalist poles. We will integrate questions about legitimate political systems, especially forms and degrees of democracy, and the interaction between political and economic frameworks. Authors studied will probably include, Nozick, Rawls, G. A. Cohen, Joshua Cohen, Joseph Carens, Jerry Gaus, and others. Open to graduate students concentrating in Philosophy. Senior undergraduates may request permission to enroll.

**2100 Seminar**

This seminar concerns the nature of a priori knowledge and justification. The course will focus on the following issues: (1) Is there a coherent conception of the a priori? (2) What must an account of the a priori explain? (3) Are a priori justified beliefs possible? If so, how? (4) Are contemporary accounts of the a priori – e.g., those based on rational insight or concept-possession – tenable? Open to graduate students concentrating in Philosophy.

**2140E The A Priori**

This seminar concerns the nature of a priori knowledge and justification. The course will focus on the following issues: (1) Is there a coherent conception of the a priori? (2) What must an account of the a priori explain? (3) Are a priori justified beliefs possible? If so, how? (4) Are contemporary accounts of the a priori – e.g., those based on rational insight or concept-possession – tenable? Open to graduate students concentrating in Philosophy.

**2200 Graduate Proseminar**

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Physics

(Primarily for Undergraduates)

0030 Basic Physics
Survey of mechanics, 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. Employs the concepts of elementary calculus but little of its technique. Lectures, conferences, and laboratory. Six hours of attendance. Recommended: MATH 0090 or 0100. Students MUST register for a lab, and a lecture section.

Fall PHYS0030 S01 12470 MWF 11:00-11:50(15)

0040 Basic Physics
See Basic Physics (PHYS 0030) for course description. Students MUST register for a lab, and a lecture section.

Sum PHYS0040 S01 60303 TTh 9:00-11:40
Spr PHYS0040 S01 21681 MWF 11:00-11:50(15)
Spr PHYS0040 S02 24725 MWF 12:00-12:50(15)

0050 Foundations of Mechanics
An introduction to Newtonian mechanics that employs elementary calculus. Intended for science concentrators. Potential physics concentrators, who do not have adequate preparation for PHYS 0070, may enroll, but are urged to continue with PHYS 0160 rather than PHYS 0060. Lectures, conferences and laboratory. Six hours of attendance. Recommended: MATH 0090 or MATH 0100. Students MUST register for a lab, and a lecture section.

Fall PHYS0050 S01 12471 MW 8:30-9:50(02)

0060 Foundations of Electromagnetism and Modern Physics
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. Students MUST register for a lab, and a lecture section.

Spr PHYS0060 S01 21682 MW 8:30-9:50(02)

0070 Analytical Mechanics
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. Students MUST register for a lab, and a lecture section.

Fall PHYS0070 S01 12472 MWF 9:00-9:50(02)

0100 Flat Earth to Quantum Uncertainty: On the Nature and Meaning of Scientific Explanation
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. FYS WRIT

Spr PHYS0100 S01 21799 TTh 2:30-3:50(11) (L. Cooper)

0110 Excursion to Biophysics
This new course aims at freshmen with good preparation in high school physics, chemistry and biology, but who have not had a set mind what specific disciplines to focus on in their college study at Brown. The course will introduce important physics concepts and techniques relevant to biology and medicine, such as diffusion and transport of molecules and intracellular components, Brown motion
and active swimming of microbes, motion of particles confined by a harmonic potential, Boltzmann distribution, exponential growth or decay, and statistics of single molecule behavior. The goal of the course is to cultivate interest and provide essential basics for more rigorous study of physical sciences as a branch of interdisciplinary science. Enrollment limited to 20 first year students. FYS WRIT

0111 Are There Extra Dimensions Under Your Bed?

Discusses some of the most exciting questions confronting contemporary physical science in a fashion suitable for both humanists and scientists. What are particles, antiparticles, superstrings, and black holes? How are space and time related? How are mass and gravity related to space and time? Do we live in a three-dimensional world, or are there extra dimensions? The seminar will address such questions with conceptual explanations based upon current research on campus, and highlight the experiments at the energy frontier, being carried out by the world's largest scientific instrument to-date, the Large Hadron Collider, located in Geneva, Switzerland. Enrollment limited to 20 first year students. FYS WRIT

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. Students MUST register for a lab, and a lecture section.

0220 Beginning 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. 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.

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. Enrollment limited to 50.

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 0090 or 0100. Labs meet every other week. Students MUST register for a lab, and a lecture section.

0500 Advanced Classical Mechanics

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.
162 / Physics

1420 Quantum Mechanics B
See Quantum Mechanics A, (PHYS 1410) for course description.
Spr PHYS1420 S01 21694 MWF 9:00-9:50(02)

1510 Advanced Electromagnetic Theory
Maxwell's laws and electromagnetic theory. Electromagnetic waves and radiation. Special relativity. Prerequisites: PHYS 0470 and MATH 0180 or 0200, or approved equivalents.
Fall PHYS1510 S01 12483 TTh 9:00-10:20(08)

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.
Fall PHYS1530 S01 12484 TTh 10:30-11:50(09)

1560 Modern Physics Laboratory
A sequence of intensive, advanced experiments often introducing sophisticated techniques. Prerequisites: PHYS 0470, 0500 and 0560; and MATH 0520, 0540 or PHYS 0720; or approved equivalents. WRIT
Spr PHYS1560 S01 21697 TTh 9:00-10:20(08)

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 0470, 0500 and 0560; and MATH 0520, 0540 or PHYS 0720; or approved equivalents. WRIT
Spr PHYS1600 S01 26635 TTh 1:00-2:20(10)

1610 Biological Physics
Introduction on structures of proteins, nucleotides, and membranes; electrostatics and hydration; chemical equilibrium; binding affinity and kinetics; hydrodynamics and transport; cellular mechanics and motions; biophysical techniques including sedimentation, electrophoresis, microscopy and spectroscopy. Suitable for undergraduate science and engineering majors and graduate students with limited background in life science. Prerequisites: MATH 0180.
Fall PHYS1610 S01 12491 TTh 2:30-3:50(11)

1980 Undergraduate Research in Physics
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).
Fall; Spr

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.
Fall; Spr

(Primarily for Graduates)

2010 Techniques in Experimental Physics
Fall PHYS2010 S01 12493 MWF 4:00-6:20(13)
Spr PHYS2010 S01 21705 MWF 4:00-6:20(16)

2030 Classical Theoretical Physics I
Fall PHYS2030 S01 12500 TTh 9:00-10:20(08)

2040 Classical Theoretical Physics II
Spr PHYS2040 S01 21706 TTh 10:30-11:50(09)

2050 Quantum Mechanics
Fall PHYS2050 S01 12501 MWF 10:00-10:50(03)

2060 Quantum Mechanics
Spr PHYS2060 S01 21707 MWF 10:00-10:50(03)

2070 Advanced Quantum Mechanics
Fall PHYS2070 S01 12502 MWF 1:00-1:50(06)

2100 General Relativity and Cosmology
Given every other year.
Spr PHYS2100 S01 26636 TTh 9:00-10:20(08)

2140 Statistical Mechanics
Spr PHYS2140 S01 21708 MWF 11:00-11:50(04)

2300 Quantum Theory of Fields I
Spr PHYS2300 S01 21709 TTh 2:30-3:50(11)

2320 Quantum Theory of Fields II
Fall PHYS2320 S01 12503 TTh 10:30-11:50(09)

2340 Group Theory
Offered every other year.
Spr PHYS2340 S01 25654 MWF 2:00-2:50(07)

2410 Solid State Physics I
Fall PHYS2410 S01 12504 MWF 11:00-11:50(04)

2420 Solid State Physics II
Spr PHYS2420 S01 21710 MWF 1:00-1:50(06)

2430 Quantum Many Body Theory
Fall PHYS2430 S01 16880 MWF 2:00-2:50(07)

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.
Fall

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.
Spr

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public.P_Main).
Preliminary Examination Preparation
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall PHYS2970 S01 12506 "To Be Arranged"
Spr PHYS2970 S01 21711 "To Be Arranged"

Research in Physics
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Fall PHYS2990 S01 12507 "To Be Arranged"
Spr PHYS2990 S01 21712 "To Be Arranged"

Political Science
(Primarily for Undergraduates)

Introduction to the American Political Process
Focuses on how the American political process resolves conflicts among elected officials, groups, institutions, and the voters, over key issues facing the country. Students MUST register for a conference, and a lecture section.

Fall POLS0101 S01 17076 MWF 10:00-10:50(03) (W. Schiller)

Introduction to Political Thought
What is justice? What is freedom? What is the basis of political authority? What is the nature of the best regime? Why should we obey the laws? When may we legitimately resist? These and other perennial questions of political life are explored. Readings include Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Marx, and J.S. Mill.

Spr POLS0110 S01 25219 MWF 11:00-11:50(04) (S. Krause)

Introduction to Comparative Politics
Introduces students to the sub-field of comparative politics or politics within states. Topics include types of regimes (i.e., democratic, authoritarian, totalitarian); transitions to democracy and the collapse of democratic regimes; revolutionary and ethnic challenges to the state; and globalization. The course also pays attention to modes of analysis in comparative politics. Cases will be drawn from various regions, including Western and Eastern Europe, Latin America, the Middle East, and Africa.

Fall POLS0200 S01 13630 MWF 11:00-11:50(04) (M. Cammott)

Understanding Radical Islam
Why has radical, political Islam emerged as a global threat in our lifetime? This course examines potential domestic sources, such as repressive governments and poverty, as well as international sources, such as U.S. foreign policy, with a special emphasis on the various strategies that governments of states with predominantly Muslim populations have taken toward political Islam.

Sum POLS0210 S01 60318 TTh 9:00-1:00 (P. Luong)

International Political Economy of Development
What is international political economy, what is development, and how can we understand the phenomenon of globalization? This course provides a general introduction to the interaction between international politics and international economics, especially related to developing countries. The first part of the course introduces several theoretical approaches to international political economy. The second part analyzes some of the classic issue areas of international trade relations; foreign direct investment; the international monetary and financial system and the role of international institutions; debt and financial crises; and poverty, inequality and the Millennium development goals. The third part includes analysis of the promises and pitfalls of globalization, and the relationship of globalization to governance, democracy, and human rights.

Sum POLS0330 S01 60308 TTh 1:30-5:30 (F. Ocakli)

Introduction to International Politics
This course provides a basic introduction to the central theoretical perspectives and debates in international relations. The second part of the course applies these models to current problems in international relations, including environmental degradation, pandemic disease, human trafficking, transnational organized crime, and terrorism.

Spr POLS0400 S01 26642 MWF 12:00-12:50(05) (R. McDermott)

Foundations of Political Analysis
This course provides an introduction for graduate students to the methods that political scientists (and other social scientists) use to generate and answer questions about the world around us. This course will provide you with the tools to evaluate critically social science research, and it will improve your ability to pose and answer research questions of your own. Both quantitative and qualitative approaches are covered. Not open to first year students.

Fall POLS0500 S01 15448 MWF 10:00-10:50(03) (R. Weitz-Shapiro)

First Year Seminar
Enrollment limited to 20 first year students. FYS

Freedom
What is freedom? Is it important? How do we know? What should we do about it? We will analyze the different conceptions of liberty - liberal egalitarian, classical liberal, Marxist, and fascist views. We will determine how the various aspects of freedom - political, personal, psychological, economic, and moral - are complementary, and determine what sorts of institutions promote or undermine these aspects. Enrollment limited to 20 first year students. FYS

Race and Political Representation
While representation is a central tenet of democracy, much disagreement exists over what political representation means and the best way to ensure equitable representation for all citizens. We will study representation and its various forms. We will then use these concepts to examine research on how well American democratic institutions capture the interest of racial and ethnic minorities. Enrollment limited to 20 first year students. FYS

Politics of American Federal Holidays
Why were ten national holidays created? The answer requires a review of key events in American political history from 1775 to 1983. Why was the Civil War pivotal? Which presidents were most important in generating support for special days? Conflicts occurred not only in creating the day but which day would be the holiday. Enrollment limited to 20 first year students. FYS

(For Undergraduates and Graduates)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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1010 Topics in American Constitutional Law
The year 2008 marked the 140th anniversary of the United States Constitution's Fourteenth Amendment, which, among many other things, extended national citizenship to newly-freed slaves and embodied the twin promises of equality and liberty for all (or at least for many). This course in Constitutional Law will consider what "equality" and "liberty" have come to mean since the passage of the Fourteenth Amendment in 1868. To that end, we will look closely at the way in which the Supreme Court's equality (equit protection) and liberty (due process) jurisprudence has evolved over the past 140 years, paying close attention to equal protection cases dealing with race, gender, disability, and sexual orientation, and to due process cases dealing with abortion, marriage, sexuality, and the family. Readings will include a Constitutional Law casebook and some additional supplemental materials.

Spr POLS1010 S01 25222 MWF11:00-11:50(04) (C. Brettschneider)

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 antiques, 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 16885 MWF 1:00-1:50(06) (P. Andreas)

1030 Modern Political Thought
What is justice? In a just society how would wealth be distributed? Would such distribution respect property rights? Does the state have the exclusive right to punish and if so why? Should the family be regarded as beyond justice? Is there a tension between democratic self-governance and freedoms from coercion? With an emphasize on both lectures and Socratic dialogue, this course is designed to engage students in conversations with the most important work in modern and contemporary political thought and to get them to engage with the most fundamental questions faced by our polity. We will draw on canonical modern and contemporary writers to see understand the most important debates of the modern period and as importantly to help us dig deep into fundamental questions of justice and legitimacy. Readings from Hobbes, Locke, Rousseau, Marx, Rawls, Okin, Cohen and others. Some prior work in political theory or philosophy suggested.

Prerequisite: POLS 0110 or instructor permission.

Spr POLS1030 S01 26643 MWF 1:00-1:50(06) (C. Brettschneider)

1050 Ethics and Public Policy
Examines moral foundations of important policy issues in the American national context as well as at Brown. Considers issues like: What is the just distribution of resources and opportunities in society? And complementary policy issues like: affirmative action, immigration, public provision of health care and social welfare. Asks whether/how liberal democracies can come to consensus on contentious moral issues like abortion, and what the ethical roles of politicians and citizens are in such struggles. Enrollment limited to 150.

Fall POLS1050 S01 16191 MWF 9:00-9:50(02)

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 26644 TTH 1:00-2:20(10)

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 Roosevelt through George W. Bush, and an exploration of the future challenges facing the winner of the 2012 Presidential election.

Spr POLS1130 S01 26645 TTH 10:30-11:50(09) (W. Schiller)

1150 Prosperity and Poverty: The History, Ethics and Economics of the Wealth of Nations
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 freedom? This course explores the problem of prosperity from a variety of disciplinary perspectives: philosophical, economic, historical, religious, and literary. Students MUST register for a common meeting, and a lecture section. Enrollment limited to 50.

Spr POLS1150 M01 24224 TTH 10:30-11:50 (J. Tomasi)
Spr POLS1150 S01 26830 T 4:00-4:50(09) (J. Tomasi)
Spr POLS1150 S02 26831 Th 4:00-4:50(09) (J. Tomasi)

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. Enrollment limited to 30.

Fall POLS1210 S01 16886 MWF 2:00-2:50(07) (R. Snyder)

1220 Politics of the Post-Soviet States
What political and economic systems have developed in the Post-Soviet states since 1991? Course focuses on failed efforts to build democracy in Russia; divergent patterns of development, including democratization and EU accession in the Baltics, reversions to authoritarianism and Islamic revival in Central Asia; conflict in Georgia and Chechnya; development of economies, civil society; relations among post-Soviet states. Prior study of political science recommended.

Fall POLS1220 S01 16887 TTH 10:30-11:50(09) (L. Cook)

1240 Politics, Markets and States in Developing Countries
How can we explain fundamental differences in economic performance and policy across developing countries in the face of Globalization? Why are some countries praised as economic "miracles," yet others seem mired in inescapable stagnation? This course addresses these questions by introducing the basic topics, concepts, and theoretical approaches that comprise the field of political economy of development. The course draws on case studies from Asia, Africa, and Latin America.

Spr POLS1240 S01 26646 TTH 2:30-3:50(11) (R. Snyder)

1270 Politics and Economics in the Middle East
Provides an overview of contemporary political and economic issues in the Middle East, including ongoing struggles over state and nation building, transnational challengers to the nation-state, civil society and opposition movements, economic development, political Islamism and the apparent rise of ethnic and sectarian strife in the region.

Spr POLS1270 S01 24225 TTH 1:00-2:20(10) (M. Cammett)

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, Indian economy has of late been going through a serious economic transformation, drawing comparisons with China. Is the comparison valid? Instructor permission required.

Spr POLS1280 S01 26647 TTH 10:30-11:50(06) (R. Snyder)
For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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recommended. Enrollment limited to 20 juniors and seniors concentrating in Political Science.

Fall POLS1820D S01 16889 F 3:00-5:20(15) (C. Brettschneider)

1820H Contraband Capitalism: States and Illegal Global Markets
This course explores the clandestine side of the global economy (including flows of drugs, people, weapons, and money) and state policing efforts. We will examine the organization of these activities, how they intersect with the state and legal economy, their relationship to armed conflicts, and how they shape (and are shaped by) domestic and international politics. Enrollment limited to 20 juniors and seniors. Course is not open to students who have taken POLS 1020.

Spr POLS1820H S01 26647 F 3:00-5:20(15) (P. Andreas)

1820J Dynamics of Agenda Building
How do new issues make the political agenda? Why aren't elections crucial? Who are the "problem pushers" and "solution savers"? How are they linked? What factors determine the life of an issue? The key processes include problem identification, conflict expansion through issue redefinition, the role of institutional actors and issue activists. Focus limited to domestic American politics. Prerequisite: POLS 0010 or 0100. Enrollment limited to 20 juniors and seniors.

Spr POLS1820J S01 24219 M 3:00-5:20(13) (R. Cobb)

1820N International Relations in Europe
Reviews central issues in European international affairs from a variety of theoretical and analytic perspectives. Substantive issues considered include the politics of European Integration, "Europeanization," European foreign and security policy, Europe as part of the North Atlantic world and transatlantic relations, issues of European identity and Europe in the world to come. Time also allocated for discussions of course participants' research. Designed mainly for advanced undergraduates, but graduate students are welcome. Enrollment limited to 20 juniors and seniors concentrating in Political Science or International Relations.

Spr POLS1820N S01 26648 M 3:00-5:20(13) (R. Cook)

1820W Market Liberalism: Origins, Principles and Contemporary Applications
What is liberalism? What are the differences between capitalist, democratic and socialist versions of liberalism? Is it true that liberal theory has undergone a form of moral evolution between its "classical" and its "modern" forms? Are there common moral values that all liberals—capitalist, democratic and socialist—affirm? If so, by what dimensions of value are these rival liberal traditions to be distinguished? Enrollment limited to 20 juniors and seniors; all others require instructor permission.

Spr POLS1820W S01 26833 M 3:00-5:20(13) (J. Tomasi)

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 senior Political Science concentrators. Instructor permission required. Instructor's permission required.

Spr POLS1821J S01 23824 F 3:00-5:20(15)

1821L International Relations of Russia, Eastern Europe and Eurasia
The course focuses relations among Russia, the European Union, China, the United States, Asia, the Middle East, and the Former Soviet States of Central Asia and the Caucasus. Topics include: expansion of Russia's power since 2000; conflicts with Georgia and Ukraine; resistance to expanded US influence in Eastern Europe; military and demographic security, immigration; alliance-building; energy exports and foreign policy. Enrollment limited to 20 juniors and seniors.

Spr POLS1821L S01 26649 W 3:00-5:20(14) (L. Cook)

1821M War in Film and Literature
This course introduces students to a study of warfare, and some of the central issues raised in war, through the use of movies and novels. Central themes include civil-military relations, leadership, the role of women in war, managing the homefront as well as issues related to battlefield tactics and strategy. Students will be encouraged to address these topics in applications related to World War I, World War II, and Vietnam in particular. This course will take place in a seminar format which stresses discussion of the relevant materials. Enrollment limited to 20 juniors and seniors concentrating in Political Science.

Fall POLS1821M S01 16890 Th 4:00-6:20(13) (R. McDermott)

1821O Politics of Economic Development in Asia
It is widely accepted that development is not simply an economic phenomenon. Political processes are intimately tied up with economic development. Does the nature of the political system affect development? Does democracy slow down economic growth? What is the relationship between democracy and economic liberalism? If countries embrace political freedoms and market-oriented economic reforms, should one expect both to succeed equally? Since the Second World War, an enormous amount of intellectual effort has gone into understanding these issues. Asia has been at the heart of much of this literature. The heaviest emphasis will be on China, India and South Korea. Enrollment limited to 20 juniors and seniors concentrating in Political Science or International Relations.

Fall POLS1821O S01 15455 Th 4:00-6:20(13) (A. Varshney)

1821T Criminal Justice System
An examination of police, criminal courts, and prisons in the contemporary United States. Major topics include police discretion, plea bargaining, and theories of punishment. We will also examine the politics of crime, including federal efforts to influence these traditional state reforms. Major assignments are based in the Rhode Island criminal justice system. Enrollment limited to 20 juniors and seniors concentrating in Political Science or Public Policy. Instructor permission required. Instructor's permission required.

Fall POLS1821T S01 13635 W 3:00-5:20(14) (R. Cheit)

1821W The Politics of Race and Gender
Politicians and scholars make a number of predictions about political life based on assumptions about race and gender. This course examines the roles of race and gender in American politics with a particular emphasis on women of color. The course focuses in social movements, political participation, and political representation. Enrollment limited to 20. Not Open to: First Year Students, Sophomores.

Fall POLS1821W S01 16891 W 3:00-5:20(14) (K. Gamble)

1821X The Politics of Social Welfare in the Middle East
This seminar explores the politics of social welfare in the Middle East. The first section of the course examines the concept and origins of welfare systems in developing countries as well as the relationship between the state, NGOs, civil society and informal networks in social service provision. This segment of the course also provides an overview and brief history of welfare regimes in the Middle East as well as concepts of charity and justice in Islam. Enrollment limited to 20 juniors and seniors concentrating in Political Science and International Relations. Preference for remaining spots given to concentrators in Developmental Studies and Middle East Studies.

Spr POLS1821X S01 23699 Th 4:00-6:20(16) (M. Cammelt)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public.P_Main).
1910 Senior Honors Thesis Preparation
Concentrators who have given evidence of superior work in political science may be admitted to honors seminar on the basis of an application submitted in the spring of their junior year. Application and guidelines may be obtained on the Department of Political Science website. Prerequisite: Fulfillment of Methods requirement. Enrollment limited to senior Political Science concentrators. Instructor permission required.

Fall POLS1910 S01 11944 MWF 12:00-12:50(12) (R. Snyder)

1920 Senior Honors Thesis Preparation
This course is a continuation of POLS 1910. Political Science Honors students who are completing their theses should enroll. Prerequisite: POLS 1910. Instructor permission required.

Spr POLS1920 S01 21393 MWF 8:00-8:50(01)

1970 Individual Reading and Research
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Fall

1971 Individual Reading and Research
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Spr

(Primarily for Graduates)

2000 Strategies of Inquiry and Research Design
Introduction to research methods common in political science research. Topics include theory development, problems of explanation and causation, problem identification, research design, and other fundamentals of empirical research. Graduate students only.

Spr POLS2000 S01 26927 M 1:30-3:50 (R. Weitz-Shapiro)

2050 Preparing the Prospectus I
This course covers selected topics in research design and methodology and is designed to help students enrolled in the Political Science PhD program to write and defend a prospectus in their third year of study. Instructor’s permission required.

Fall POLS2050 S01 11954 To Be Arranged (L. Cook)

2051 Preparing the Prospectus II
This course covers selected topics in research design and methodology and is designed to help students enrolled in the Political Science PhD program to write and defend a prospectus in their third year of study. Prerequisite: POLS 2050. Instructor’s permission required.

Spr POLS2051 S01 21402 To Be Arranged (L. Cook)

2090D Models of Excellence in Comparative Research: Classic Works and the Scholars Who Produced Them
Explores major works that span the range of theoretical approaches and intellectual styles in modern comparative research. Includes in-depth interviews with leading scholars where they reflect on their intellectual formation, their works and ideas, the nuts and bolts of the research process, and the evolution of the field. Graduate students only; qualified undergraduates with instructor’s permission.

Fall POLS2090D S01 16892 Th 1:00-3:30(10) (R. Snyder)

2100 Proseminar in American Politics
Introduction to broad issues in American politics. Topics include the interplay of political institutions in the American setting, the process of policy-making, and the behavior of key actors in American politics. Graduate students only; qualified undergraduates with instructor’s permission.

Fall POLS2100 S01 16893 To Be Arranged (W. Schiller)

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 contours of post-Cold War world politics, America and the world, and moral issues. Not open to undergraduates.

Fall POLS2130 S01 16894 M 6:00-8:30 PM(18) (U. Krotz)

2210 Race, Ethnicity and Politics
This is a graduate-level introduction to the politics of race and ethnicity in the US context. The seminar examines major theoretical perspectives, debates, and research findings in the study of race and its critical influence upon the politics of the US. The course focuses on political representation, political participation, and political attitudes as related to racial and ethnic minorities. Graduate students only; qualified undergraduates with instructor’s permission.

Spr POLS2210 S01 26650 To Be Arranged (K. Gamble)

2250 Extreme Politics: How Radicals Affect Political Change
Serves as a graduate seminar that provides an in-depth analysis and critical evaluation of radical movements and their effects on the democratic process. Draws on several historical and contemporary case studies in which radical groups have played a significant role. Graduate students only; qualified undergraduates with instructor’s permission. Enrollment limited to 20.

Spr POLS2250 S01 24234 To Be Arranged (P. Luong)

2320 Ethnic Conflict
What is ethnicity? What does it share with nationalism and in what respects is it different? Why do ethnic groups fight violently and kill wantonly, especially after living peacefully for a long time? Under what conditions do they manage their relations peacefully? Do people participate in ethnic insurgencies because of greed or grievance? Will ethnic groups disappear as modernity proceeds further? These questions will guide our intellectual journey over the semester. Graduate students only; qualified undergraduates with instructor's permission. Enrollment limited to 20.

Fall POLS2320 S01 16895 M 1:00-3:30(10) (A. Varshney)

2350 Freedom
Examines the meanings of freedom together with the self-understandings, social practices, and political institutions that underlie and constitute it. Considers literature on freedom from the liberal, republican, and democratic traditions, including Berlin, Pettit, Arendt, Honneth, Butler, and others. Enrollment limited to 15.

Spr POLS2350 S01 26651 W 2:00-4:30(14) (S. Krause)

2580 Introduction to Quantitative Research Methods
Course begins with basic introduction of statistical analysis and, using STATA, works with students to conduct analysis of their own data set. Open to graduate students in Political Science and Public Policy only.

Fall POLS2580 S01 14957 To Be Arranged

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Portuguese and Brazilian Studies

(Primarily for Undergraduates)

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  10519  MW 2:00-2:50 & TTh 1:00-2:20(10)  (P. Sobral)

0110 Intensive Portuguese

A highly intensive course for students with little or no preparation in the language. Stresses the fundamental language skills of understanding, speaking, reading, and writing. Aspects of Portuguese and Brazilian culture are also presented. Uses a situational/natural approach that emphasizes communication in Portuguese from the very first class. A two-semester sequence in one semester with ten contact hours each week. Carries double credit and covers the equivalent of two semesters. This course should be chosen, in the fall, by students beginning the study of Portuguese as sophomores who would like to participate in the Brown-in-Brazil Program as juniors. Offered every semester.

Fall  POBS0110  S01  11618  MWF 1:00-1:50 & TTh 10:30-11:50(03)  (P. Sobral)

Spr  POBS0110  S01  26458  MWF 1:00-1:50 & TTh 9:00-10:20(04)  (P. Sobral)

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.

Spr  POBS0200  S01  21231  MW 2:00-2:50 & TTh 1:00-2:20(10)  (P. Sobral)

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.

Fall  POBS0400  S01  10556  MW 12:00-12:50 & MWF 11:00-11:50(04)  (P. Sobral)

Spr  POBS0400  S01  21232  MWF 10:00-10:50 & TTh 10:30-11:50(03)  (P. Sobral)

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  10557  TTh 2:30-3:50(11)  (P. Sobral)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
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.

Spr  POBS0620  S01  21233  TTh 2:30-3:50(11) (L. Simas-Almeida)

0720  Racial Politics in Contemporary Brazil (AFRI 0710A)  
Interested students must register for AFRI 0710A S01 (CRN 21777).

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? Piriâna, Lispector, Sciar, Rushdie, Sálim, Cristina Garcia, V. S. Naipaul and others. Conducted in English. Enrollment limited to 20 first year students. FYS WRIT

Fall  POBS0810  S01  10558  TTh 9:00-10:20(08) (P. Sobral)

0910  On the Dawn of Modernity  
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 first year students. FYS LILE

Fall  POBS0910  S01  16712  W 3:00-5:20(14) (O. Almeida)

(For Undergraduates and Graduates)

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  10559  T 12:00-2:20(10) (L. Simas-Almeida)

1090  Portuguese-speaking Cultures Via Film  
We will view and discuss films from Brazil, Lusophone Africa, Portugal and other regions as vehicles to understand the cultural diversity of Portuguese-speaking countries. Readings will include related fiction and non-fiction focusing on immigration, gender, race, family dynamics and social inequality. Students will write a series of short papers and develop a final project in consultation with the instructor. Particular attention will be paid to contemporary Brazilian cinema. Prerequisite: POBS 0610, 0620, 1030, or 1080, or instructor permission. Enrollment limited to 20. Conducted in Portuguese.

Spr  POBS1090  S01  26762  Th 4:00-6:20(16) (P. Sobral)

1500  Topics and Themes in Portuguese and Brazilian Literatures  
Topics will vary from semester to semester.

1500A  African Literatures of Portuguese Expression  
A survey of representative African narrative literature of Portuguese expression (Cape Verde, Guinea-Bissau, São Tomé e Príncipe, Angola, and Mozambique). The selections will cover the periods before and after the independence of these former Portuguese colonies. Conducted in Portuguese. Enrollment limited to 40.

Fall  POBS1500A  S01  16713  Th 4:00-6:20(13) (L. Simas-Almeida)

1500I  Fiction and History (COLT 1810G)  
Interested students must register for COLT 1810G S01 (CRN 26378).

1500W  The 'New Jew' and the Diaspora: Voices from Israel, Brazil and America  
Studies Jewish identity and belongingness in Israel and the Jewish Diasporas of Brazil and America within the context of multiple homelands. If the concept of the 'New Jew' suggests alternative Jewish universes in which Israel is not the center, does this imply the end of the Jewish Diaspora? This course will debate this question via novels and short stories by some of the representative writers from the above three nations. Conducted in English. Enrollment limited to 20. DVPS

Fall  POBS1500W  S01  17020  W 3:00-5:20(14) (N. Vieira)

1600  Topics and Themes in Portuguese and Brazilian Cultures and Civilizations  
Topics will vary from semester to semester.

1600A  Afro-Luso-Brazilian Triangle (AFRI 1020C)  
Interested students must register for AFRI 1020C S01 (CRN 21770).

1600D  Portuguese Discoveries and Early Modern Globalization  
Explores the political, commercial, military, cultural and social dimensions of the Portuguese presence in Africa, Asia and America, 1415-1808. Examines different phases in the context of geographical regions, subsequently integrating the different regions into a multi-continental, multi-oceanic, global system. Emphasizes European/non-European contacts and interactions. Conducted in English.

Spr  POBS1600D  S01  23936  'To Be Arranged'

1600E  Europe and the Indian Ocean (HIST 1950E)  
Interested students must register for HIST 1950E S01 (12272).

1600G  From Morocco to China (HIST 1950F)  
Interested students must register for HIST 1950F S01 (21576).

Interested students must register for HIST 1972R S01 (CRN 26689).

1600Q  Perceptions of the Other and Ethnographical Writing in Early Modern Portugal  
Focuses on the privileged situation of Portugal as far as the knowledge of extra-European cultures in early modern Europe is concerned. The course examines agents, instruments and mechanisms of information gathering and diffusion of the "outer world" in Europe via Lisbon. The most important topos of these Portuguese ethnographical representations will be discussed through a close analysis of a wide range of contemporary texts and visual records. Conducted in English.

Fall  POBS1600Q  S01  15811  'To Be Arranged'

1600W  Science and Technology Policy in the Global South (PPAI 1701G)  
Interested students must register for PPAI 1701G S01 (CRN 14715).

1670  History of Brazil (HIST 1670)  
Interested students must register for HIST 1670 S01 (CRN 11938).

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

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
170 / Public Policy and American Institutions of four hours weekly in a second-language field-teaching practicum. Conducted in English. Enrollment limited to 20.

Spr POBS1720 S01 25137 T 4:00-6:20(16) (S. Smith)

1800 Concentration Seminar in Portuguese and Brazilian Studies An interdisciplinary seminar intended primarily for junior and senior concentrators in Portuguese and Brazilian Studies, but open to nonconcentrators and graduate students with consent of the instructor. May be repeated for credit with content changed. Conducted in Portuguese.

1800F The Lusophone World and the Struggle for Modernity A study of classical writings from the Portuguese-speaking world dealing with the issue of modernity, focusing particularly on the Counter-Reformation and Baroque paradigms versus the Enlightenment. Portuguese, Brazilian and African writers such as Antero de Quental, Sérgio Buarque de Holanda, Vianna Moog, Amílcar Cabral and others will be read critically and in a comparative approach. Conducted in Portuguese. Enrollment limited to 40.

Spr POBS1800F S01 26459 W 3:00-5:20(14) (O. Almeida)

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. Instructor's permission required.

Fall; Spr

1990 Research and Preparation of Honors Projects 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. Instructor's permission required. Not Open to: First Year Students, Sophomores, Juniors.

Fall; Spr

(Primarily for Graduates)

2020 Problems and Current Issues in Bilingual/ESL Education Topics will vary from semester to semester.

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.

Spr POBS2020A S01 26460 T 4:00-6:20(16) (S. Smith)

2120 Methods and Materials for Portuguese-English Bilingual Programs Topics will vary from semester to semester.

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.

Fall POBS2120A S01 16715 Th 4:00-6:20(13) (M. Pacheco)

2500 Topics and Themes Topics will vary from semester to semester.

2500E Portuguese Cultural and National Identity A critical reading of some key issues in Portuguese intellectual history regarding Portuguese national identity. Classical authors such as Verney, Antero de Quental, Teixeira de Pascoais, Fernando Pessoa, Antonio Sérôgo, and Eduardo Lourenço are read along with contemporary theoretical works on the issue of cultural and national identity. Conducted in Portuguese.

Fall POBS2500E S01 16716 ‘To Be Arranged’ (O. Almeida)

2500G Nation and Narration The invention and transformation of the idea of Brazil as a nation narrative texts since the middle of the 19th century. Manoel Antônio de Almeida, José de Alencar, Adolfo Caminha, Machado de Assis, Monteiro Lobato, Mário de Andrade, Adalzira Bittencourt, Antônio Callado and João Ubaldo Ribeiro. Theoretical texts by Benedict Anderson, Homi Bhabha, Edward Said, Eric Hobsbawn, Frantz Fanon, Roberto Schwarz and others. Conducted in Portuguese.

Fall POBS2500G S01 16717 W 3:00-5:20(14) (L. Valente)

2500L Latin American Historiography (HIST 2971E) Interested students must register for HIST 2971E S01 (CRN 16953).

2600 Topics and Themes Topics will vary from semester to semester.

2600B Saramago and His Contemporaries Focuses mainly on the "oeuvre" of José Saramago, the recently deceased Portuguese Nobel Prize winner. Four other well-known Portuguese writers (Vergílio Ferreira, Agustina Bessa-Luís, Antônio Lobo Antunes, Lídia Jorge) are also studied as a way of contextualizing Saramago's work but, more importantly, for their own merit as outstanding novelists. Complementary readings will mostly consist of theoretical texts concerning an approach to contemporary novels based on the nexus between history and fiction on the one hand, and the construction of emotions in literature on the other. Conducted in Portuguese. Enrollment limited to 25.

Spr POBS2600B S01 26786 M 3:00-5:20(13) (L. Simas-Almeida)

2600O The Sage of Suspicion: Machado de Assis and the agencies of Narrative Novels and short stories of Machado de Assis within the context of the socio-political reality of nineteenth-century Brazil. Attention to the ideologies of Brazil's ruling class, its self-image and views on national identity, class and race; the issue of fiction vs. reality; and/or such topics as irony, symbolism, and narratology. Conducted in Portuguese.

Fall POBS2600O S01 17179 M 3:00-5:20(13) (N. Vieira)

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 11237 ‘To Be Arranged’
Spr POBS2970 S01 21234 ‘To Be Arranged’

2980 Reading and Guided Study Reading in Portuguese language, literature, civilization, and bilingual studies. Conducted via Portuguese readings and discussions. 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.

Fall; Spr

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 11256 ‘To Be Arranged’

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
## Public Policy and American Institutions

### 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. Instructor permission required.

**Fall PPAI0100 S01 15804** TTh 9:00-10:20

### 0700 First Year Seminars
These seminars are reserved for First Year Students. Enrollment is limited to 20. FYS

### 0700J Examining Social Policy Issues through Contemporary Fiction
This course examines how contemporary novelists are addressing poverty, homelessness, mental illness, race relations, domestic abuse, and other important social issues. Students will employ a "problem definition" framework to consider the way that novels "typify" social problems by making claims about their scope, severity, and causation, as well as the attributes of "afflicted" groups and individuals.

**Fall PPAI0700J S01 15803** W 3:00-5:20 (14)

### 1200 Policy Analysis and Program Evaluation
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: POLS 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.

**Spr PPAI1200 S01 20414** M 3:00-5:20 (13)

### 1700 Research Seminar in Public Policy
Enrollment limited to 20. Instructor's permission required.

### 1700B Social Welfare Policy in the United States
Exposes students to the key challenges for social welfare policy-making in the United States. Particular attention will be given to the formulation and administration of prominent welfare, health, and education policies. Course materials also will explore how demographic and economic trends affect the implementation of social welfare policies. Instructor permission required. Enrollment limited to 20.

**Spr PPAI1700B S01 26205** M 9:00-11:20 (20)

### 1700J GIS and Public Policy
An introduction to the theory and practice of social science Geographic Information Systems (GIS) as applied to public policy analysis. Topics include: the geographical basis of policy issues, spatial mapping, and the use of ArcView software to study policy problems. Instructor's permission required. Enrollment limited to 20.

### 1700K Health Policy Challenges
Introduces students to the U.S. health care system. Focuses on how the organization, financing, and market structure of the system affect the key issues of access, cost, quality, and equity of care. Specific issues include minority and vulnerable populations, technology, risk adjustment, managed care, long-term care, ethics, and public health. Enrollment limited to 20 juniors and seniors.

**Spr PPAI1700K S01 26155** F 3:00-5:20 (15)

### 1700R Urban Revitalization: Lessons from the Providence Plan
Explores policy issues facing cities today and examines how the public, private, and nonprofit sectors have mobilized in selected cities to address these issues. Topics include jobs and economic development, education, public safety, and regional approaches. Focuses on The Providence Plan, a joint city-state revitalization initiative designed to address the problems of urban poverty. Comparisons with similar programs in other cities. Instructor permission required.

**Fall PPAI1700R S01 10593** T 6:00-8:20 PM (12)

### 1700T Good Government
An applied ethics course specifically for students with backgrounds in Public Policy, it will emphasize the primary themes of good government: openness, deliberation, and integrity. Students will develop an essay on good government and do research for case studies of ethical dilemmas involving public servants. Prerequisite: POLS 0100 (or equivalent). Instructor permission required. Enrollment Limited to 20.

**Fall PPAI1700T S01 10594** M 3:00-5:20 (13)

### 1700V Nonprofit Organizations
Contemporary nonprofits and their role in community building and shaping public policy are central to this course. Topics include how strong coalitions impact housing, welfare and children's policy, organizing empowered communities, the influential and engaged donor and building the value of nonprofits. Case studies will be featured and new nonprofit models will be conceptualized to strategically address critical human need. Enrollment limited to 20 juniors, seniors, and graduate students concentrating in Public Policy.

**Spr PPAI1700V S01 20448** W 9:00-11:20 (03)

### 1700Y Crisis Management
Introduces future policymakers to the multifaceted decision-making process in which governments, businesses, advocacy organizations, and the public are thrust into the throes of a policy crisis. Various crisis management theories, key stakeholders in a crisis situation, and the positive and negative effects of various strategies are analyzed. Enrollment limited to 20 junior and senior concentrators in Public Policy.

**Fall PPAI1700Y S01 14721** W 10:00-12:20 (03)

### 1700Z State and Local Government
Examines state and local politics and government in the United States. The first part of the course examines the historical underpinning and division of power of the major political actors, institutions, and processes through both institutionalist perspectives. The second part focuses on the role of states in shaping significant policy areas including civil unions, education, healthcare, welfare, and the environment. Enrollment limited to 20.

**Spr PPAI1700Z S01 26206** T 4:00-6:20 (16)

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For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
1701D  Aging and Public Policy: The Impact of an Aging Society on Public and Private Sector Organizations

A "silver tsunami" is coming. Soon 20% of US residents will be over the age of 65. Governmental policy makers and business leaders are scrambling to adapt as the aging population reshapes the demand for services and products and threatens to unravel the social safety net. This course will investigate the aging wave, analyze its impact on both private and public organizations through case study review, and consider implications for future management and policy. Emphasis will be on "social entrepreneurship"--practical solutions and their implementation within organizations. Enrollment limited to 20, preference given to graduate students, public policy concentrators, and seniors.

Fall  PPAI1701D  S01  13737  M 6:00-8:20 PM(18)  (S. Gresham)

1701G  Science and Technology Policy in the Global South

Using theoretical ideas and empirical examples, this seminar explores from a variety of perspectives the relationships among science, technology, society, and public policymaking in the Global South. Bridging public policy and science studies, the seminar introduces a more internationalized perspective on science and technology governance, and enhances capacity for effective policymaking practice. Students will be graded on three writing assignments, participation in a web-based roundtable with counterparts in Brazil, South Africa and/or India; and class participation. Enrollment limited to 20 junior/senior Public Policy concentrators; others welcome with instructor's permission.

Fall  PPAI1701G  S01  14715  T 9:00-11:20(08)  (G. Augusto)

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 the 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 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.

Fall  PPAI1701H  S01  14851  F 10:00-12:20(04)  (R. Arenberg)

1701I  American Immigration Policy: Issues and Politics in State and Nation

No description available. Enrollment limited to 20.

Fall  PPAI1701I  S01  16173  Th 3:00-5:20(13)  (A. Filindra)

1701J  Policy Implementation

Why do well-intentioned policies sometimes produce unfortunate results? This course will examine how policies designed by elected officials, bureaucrats, and courts are translated into practice through implementation, how and why public policies succeed or fail to produce changes in practice, and how policy implementation bears on democratic governance. The course will consider policy implementation across policy domains, with recurring attention to K-12 education policy. Enrollment is limited to 20.

Spr  PPAI1701J  S01  26532  W 3:00-5:20(14)  (S. Moffitt)

1701K  Governance in the Academy: A University at Work in the 21st Century

Focuses on understanding and evaluating the governance of the modern university. Brown will be used as one example to illustrate and illuminate various aspects of university governance. Themes of leadership, effective decision-making, priority-setting, planning, conflict and crisis management, and optimal organizational structure and behavior will be discussed. Students will be well-versed in the language, structure, roles of actors, and general operations of university governance and equipped to analyze and assess the strengths and weaknesses of various models. Students with an interest in pursuing a career in academia or other non-profit organizations will benefit from this course. Enrollment limited to 20 juniors and seniors.

Fall  PPAI1701K  S01  16113  M 3:00-5:20(13)  (R. Carey)

1701L  Comparative Institutional Decision-Making

Designed to introduce students to issues of bureaucratic politics and policy making in comparative perspective. The premise of this class is that thinking about the role of the bureaucracy is crucial to any theory of how modern democracy should work, as well as to our understanding of how many different modern democracies do work. Enrollment limited to 20 juniors, seniors, and graduate students in Public Policy and Political Science.

Spr  PPAI1701L  S01  26004  T 9:30-11:50(09)  (R. Weitz-Shapiro)

1701M  Juvenile Justice Institutions and Policy

Examines the historical and legal development of the juvenile justice system and provides an overview of delinquency theory. These frameworks are used to study the major institutions and current policy issues in the juvenile justice system. Special topics include teen and family courts, age of jurisdiction, racial disparities in juvenile justice, and female delinquency. Students engage in a semester-long project to develop a policy brief addressing a current issue in juvenile justice. Enrollment limited to 20 juniors and seniors.

Fall  PPAI1701M  S01  16328  Th 3:00-5:20(13)  (V. Cooley)

1970  Independent Reading and Research

Supervised reading or research. Specific program arranged in terms of the student's individual needs and interests. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor's permission required.

Fall  1971  Independent Reading and Research

See Independent Reading and Research (PPAI 1970) for course description. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor’s permission required.

Spr  1990  Public Policy Colloquium

An advanced two-semester research seminar for senior honors candidates in the public policy and American institutions concentration. Participants jointly consider strategies appropriate to researching and writing a senior paper before proceeding to individual research on topics they choose. Each participant is required to present a summary of his or her work to the colloquium. Instructor’s permission required.

Fall  PPAI1990  S01  10596  W 12:00-1:20(12)  (R. Cheit)

1991  Public Policy Colloquium

See Public Policy Colloquium (PPAI 1990) for course description. Instructor’s permission required.

Spr  PPAI1991  S01  20723  "To Be Arranged"  (R. Cheit)

(Primarily for Graduates)

2000  Institutions and Policy Making

Studies how political, social, and economic institutions structure policymaking. Covers a variety of policy areas such as education, health care, technology policy, welfare, and social policy.

Fall  PPAI2000  S01  10597  Th 4:00-6:20(13)  (S. Moffitt)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public.P_Main).
**2010 Economics and Public Policy**
Examines issues in government spending and tax policy. Conceptual topics include the normative assignment of responsibility with federal systems and the equitable distribution of income. Specific policy applications are covered.

Spr, PPAI2010, S01, 20451, TTh 1:00-2:20(10), (K. Gee)

**2020 Public Budgeting and Management**
Explores how organizations use budgets and management tools to achieve broader social, economic, and political objectives. It is designed to show how these techniques can be used to improve organizational performance.

Fall, PPAI2020, S01, 10598, MW 8:30-9:50(02), (P. Marino)

**2030 Statistics**
Covers social and economic statistics and their role in public policy research. Among the topics explored are descriptive and inferential statistics, measurement, sampling, and multivariate analysis. Open to graduate students in Public Policy or Political Science.

Fall, PPAI2030, S01, 10599, T 1:00-2:20(10), (R. Phinney)

**2040 Policy Analysis**
Investigates policy analysis and program evaluation with emphasis on assessment of government programs.

Spr, PPAI2040, S01, 20452, Th 4:00-6:20(16), (V. Cooley)

**2130 Organization Theory: Praxis in Public and Nonprofit Sector Organizations**
Graduate seminar exploring how organizational, political and professional cultures shape policymaking and implementation; how policymakers and practitioners acquire policy-relevant knowledge and frame issues for public action; and how policy is made and implemented in complex interactive systems. Draws on instructor's own public policy experience in U.S. and southern Africa. Readings are transdisciplinary, and both U.S. and international. Seminar provides thorough grounding in key organization theories, while enhancing capacity to act across boundaries. No prerequisites. Reserved for graduate students in Public Policy and Public Affairs. Advanced undergrads and graduate students from other departments may apply for permission from the instructor. Enrollment limited to 30.

Fall, PPAI2130, S01, 13730, W 3:00-5:20(14), (G. Augusto)

**2150 Strategic Communication**
Teaches students communication skills for social change, and examines how individuals and organizations frame issues in order to effect change.

Spr, PPAI2150, S01, 23668, M 3:00-5:20(13)

**2550 Managing and Leading in Public Affairs**
Examines issues related to leading and managing in the realm of public affairs, covering foundation topics such as: honor, ethics, and accountability; management and organizational theory; organizational behavior; managerialism, performance, and strategic management; leadership; personnel management and social equity. Examining tools for effective relationship and networking building, cases will be used to apply concepts learned.

Fall, PPAI2550, S01, 13107, Th 9:00-11:20(08), (J. Slattery-Bownds)

**2600 Social Science Data Technologies**
Covers the applied use of data sources and computer software programs. Its goals are to teach students how to use common software packages and access policy-relevant data.

Fall, PPAI2600, S01, 10600, T 4:00-6:20(13), (J. Combs)

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For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
and does sacredness involve a prohibition against torture? LILE

What are the nature and effects of pain? Are human beings sacred, perspectives. It also deals with more general themes related to torture: explores the recent debates about torture from secular and religious

Indeed, some argue that in extreme cases, it may be obligatory to law and human rights declarations that torture is never permissible.新 urgency since 9/11. People are now questioning the consensus of

spr RELE0090F S01 26404 TTh 10:30-11:50(09) (H. Roth)

the debates about 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? LILE

spr RELE0090E S01 26403 M 3:00-5:20(13) (M. Satlow)

Fall RELS0040 S01 16659 TTh 10:30-11:50(09) (H. Roth)

The debates about 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? LILE

spr RELE0090E S01 26403 M 3:00-5:20(13) (M. Satlow)

Spr RELS0090E S01 26403 M 3:00-5:20(13) (M. Satlow)

0090 Freshman Seminar
Enrollment limited to 20 first year students. FYS

0090E Faith and Violence
Explores the relationship between religious texts and rhetoric and violence. How do sacred texts promote or discourage violence, and how have later religious communities understood (and continue to understand) these texts? While the course will focus mainly on Judaism, Christianity, and Islam, occasional Asian examples will be used. No prerequisites. Reserved for First Year students. Enrollment limited to 20. FYS LILE WRIT

0090F Friendship in the Ancient World
How have ancient societies understood friendship, and how do ancient ideas about friendship differ from or resemble those of contemporary Westerners? This seminar, a comparative investigation of the ways in which friendship has been represented in the Hebrew Bible, Mesopotamian literature, and Greco-Roman texts, will addresses these and other questions through study of materials such as the Epic of Gilgamesh, the Iliad, the Book of Ruth, 1 and 2 Samuel (on Jonathan and David), the Wisdom of Ben Sira (Sirach), and Aristotle’s Nicomachean Ethics. Enrollment limited to 20 first year students. FYS

Persian see Center for Language Studies

Religious Studies

(Primarily for Undergraduates)

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.

Fall RELS0040 S01 16659 TTh 10:30-11:50(09) (H. Roth)

0068 Religion and Torture
The debates about 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? LILE

Spr RELS0068 S01 26402 MWF 2:00-2:50(07) (S. Bush)

0071 Believers, Agnostics, and Atheists in Contemporary Fiction (JUDS 0050A)
Interested students must register for JUDS 0050A S01 (CRN 14060).

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
0210 Celluloid Jesus
An examination of the representations of Jesus in cinema from the second half of the twentieth century, with judicious comparative use and analysis of ancient narrative traditions about Jesus, particularly in the New Testament gospels. Films include: Samuel Ray's King of Kings; Pasolini's Passion of St Matthew; Monty Python's Life of Brian; Denys Arcand's Jesus of Montreal; Scorsese's Last Temptation of Christ, Jesus Christ Superstar and The Matrix. Students MUST register for a lab, and a lecture section.

Spr RELS0210 S01 26406 TTh 1:00-2:20(10) (R. Kraemer)

0245 Jews between Christians and Muslims in the Early Modern World (JUDS 0990L)
Interested students must register for JUDS 0990L S01 (CRN 26776).

0260 Religion Gone Wild: Spirituality and the Environment
A study of the dynamic relation between religion and nature. Religion, in this course, includes forms of spirituality within and outside the bounds of conventional religious traditions (for example, Buddhism and Christianity, on the one hand; ecofeminism and nature writing on the other). Topics in this study of religion, philosophy, and ecology will include environmental justice, environmental degradation, and depictions of humans in relation to the natural world. Enrollment limited to 20. LILE

Spr RELS0260 S01 26407 TTh 2:30-3:50(11) (M. Cladis)

0280 Contemporary Religion: Qualitative Methods (JUDS 0100)
Interested students must register for JUDS 0100 S01 (CRN 26451).

0290 Topics in the Study of Religion

0290D Women, Sex and Gender in Islam
This course is a survey of women in Islamic society from the medieval to the modern worlds. Using a variety of non-fiction, fiction and film sources, we will address issues such as women and Islamic law, women's bodies and images of Muslim women in the Muslim world; contemporary feminism and movements in Islam, the question of secularism, veiling, and others. Preference given to students with prior university level coursework in Islam. Examples include RELS 0150, 0640, 1520. Enrollment limited to 20. DVPS LILE

Spr RELS0290D S01 26408 MWF 11:00-11:50(04) (N. Khalek)

0321 The Old Testament/Hebrew Bible and Its World (JUDS 0470)
Interested students must register for JUDS 0470 S01 (CRN 26453).

0360 The Bible as Literature (JUDS 0260)
Interested students must register for JUDS 0260 S01 (CRN 16698).

0400 New Testament and the Beginnings of Christianity
How and why Christianity emerged in various forms in the ancient Mediterranean. Insights from religious studies, gender studies, literary studies, anthropology, and other fields. Careful critical readings of New Testament books, non-canonical gospels, early Christian letters, ancient apocalypses. Topics include: Jewish contexts; representations of Jesus; Paul and early communities; Christians and imperial Rome; gender constructions; canonization; eventual separation of Christianity and Judaism. Open to all students. LILE WRIT

Fall RELS0400 S01 10731 MWF 2:00-2:50(07) (R. Kraemer)

0440 The World of Byzantium (CLAS 0660)
Interested students must register for CLAS 0660 S01 (CRN 15953).

0750 Death and the Afterlife in the Ancient World
This course focuses on the evolution of beliefs and rituals related to death in and around the Mediterranean, including Egyptian, Greek, and Roman cultures. Using an interdisciplinary approach, we combine methodologies from Anthropology, Classics, and Religious Studies. Topics include myths of the afterlife; books of the dead, magic, and death rituals; divinization, heaven, hell, and Last Judgment, and the impact of Christianization on Roman understandings of death. WRIT

Spr RELS0750 S01 26409 T 4:00-6:20(16) (N. Denzey)

0850 Liberation Theology in the Americas
Liberation theology seeks to bring the social teachings of Christianity to bear on political and economic injustice. This course treats liberation theologies as socially grounded, politically engaged currents in religious thought. Focusing on Latin America, we will investigate the historical contexts and central themes of liberation theology: the relationship between theory and practice, the political function of the church, the relation between political freedom and salvation, and the role of intellectuals. DVPS LILE

Fall RELS0850 S01 16660 TTh 1:00-2:20(10) (T. Lewis)

0880A Difficult Relations? Judaism and Christianity from the Middle Ages until the Present (JUDS 0990G)
Interested students must register for JUDS 0990G S01 (CRN 16743).

0880B Body and Society: Medicine and Medical Ethics in the Pre-modern World (JUDS 0990J)
Interested students must register for JUDS 0990J S01 (CRN 26475).

0880C Religion and Sexuality (JUDS 0990F)
Interested students must register for JUDS 0990F S01 (CRN 17028).

0910 Music, Drama and Religion in India
Music, drama, and dance have played central roles in Indian religious life from ancient times. They have expressed and nourished a wide range of devotional emotions toward Hindu deities and functioned as meditative modes of attaining an impersonal state. The seminar explores diverse forms of religious experience produced and enhanced by the aesthetic means of music, drama, and dance. Audiovisual materials provide a sense of these aesthetic-religious performance forms. DVPS LILE

Spr RELS0910 S01 25800 W 3:00-5:20(14)

(For Undergraduates and Graduates)

1000 Methods in Religious Studies
Intensive introduction to classical and contemporary theories of religion and the principal methods for the study of religion. Junior seminar for religious studies concentrators. LILE WRIT

Fall RELS1000 S01 10732 W 3:00-5:20(14) (S. Bush)

1050 Biblical History: What Really Happened?? (JUDS 1980K)
Interested students must register for JUDS 1980K S01 (CRN 26468).

1150 Religion in the Dead Sea Scrolls
An examination of the Dead Sea scrolls and the archaeology of Qumran with a particular focus on the religious aspects of this community. How did the authors of these scrolls envision their relationship with the divine? How did they worship? How did they understand religious and moral perfection? This class will have an additional section for graduate students.

Fall RELS1150 S01 17159 M 3:00-5:20(13) (M. Satlow)

1214 Divination in Ancient Mesopotamia (AWAS 1750)
Interested students must register for AWAS 1750 S01 (CRN 16642).

1216 Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia (AWAS 1100)
Interested students must register for AWAS 1100 S01 (CRN 26392).
176 / Religious Studies

1415 Topics in East Asian Religious Thought
Examines philosophical issues in the religious traditions of East Asia, including Confucianism, Daoism, and Buddhism. Issues will be selected within specific traditions, across them, and in cross-cultural comparisons with Western philosophies and scholarly methodologies. Topics may consider problems in epistemology, ontology, soteriology, the nature of religious experience, theories of human nature, contemplation, and ethical thought, and in the cultural presuppositions that we import to studying East Asian religions.

1415A Classical Daoist Thought
Considers philosophical issues in early Daoism. We will work with classical texts such as Guanzi's "Inward Training," the Laozi, the Zhuangzi, and the Huainanzi and examine issues in them that have been of interest to comparative philosophers, such as cosmology and cosmogony, the nature of religious experience, and the types of implicit and explicit moral thought. The course will feature primary works in translation and secondary works by authors such as Graziani, Ivanhoe and Kjellberg, Moeller, Ames, Yearley, Raphals, Cook, Roth, and Slingerlands. Prerequisites: RELS 0040 and 0120. Enrollment limited to 20.

Spr RELS1415A S01 26913 Th 4:00-6:20(16) (H. Roth)

1440 Themes in Japanese Buddhism
An exploration of critical themes and debates in the study of Japanese Buddhism. Participants become conversant with the key features of medieval Japanese thought as well as the strengths and weaknesses of established conceptual models in Japanese Buddhist studies. Readings include primary texts in English translation and modern secondary interpretations. Recommended: a course in Buddhism or East Asian religions. DVPS LILE

Fall RELS1440 S01 16661 TTh 2:30-3:50(11) (J. Sawada)

1445S The History, Philosophy, and Practice of Rinzai Zen Buddhism (EAST 1950S)
Interested students must register for EAST 1950S S01 (CRN 16639).

1446 The Floating World: Early Modern Japanese Culture (EAST 1400)
Interested students must register for EAST 1400 S01 (CRN 16636).

1735 Nature, Culture, History and the Environment: the Humanistic Lens (ENVS 1550)
Interested students must register for ENVS 1550 S01 (CRN 26752).

1745 Religion, Secularization, and the International (HMAN 1970A)
Interested students must register for HMAN 1970A S01 (CRN 26966).

1880B Politics and Authority in Islamic Law and Society (HMAN 1970Y)
Interested students must register for HMAN 1970Y S01 (CRN 16723).

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. Instructor's permission required. Fall; Spr

1999 Thesis Preparation
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. Instructor's permission required. Fall; Spr

(Primarily for Graduates)

2000 Theory of Religion
Critical examination of major approaches to the study of religion, especially those of the anthropology and the history of religions, with attention to issues in current debate.

Fall RELS2000 S01 16662 W 3:00-5:20(14) (T. Lewis)

2100 Seminar in Ancient Israel and Judaism

2100C 1 and 2 Kings
Translation and exegesis of Kings. Intended for those with advanced Hebrew.

Fall RELS2100C S01 16663 M 5:30-7:20(18) (S. Olyan)

2100H Pro-Seminar on the Study of Jews and Judaism in the Greco-Roman Mediterranean
A graduate level introduction to the study of Jews and Judaism in the Mediterranean orbit from the Hellenistic period through the late Roman Empire. Topics include overviews of sources, materials, methods and theories, including current debates about terminology (Jews/Judeans/Judaism). Required of all RAM graduate students admitted in 2011 and after. Not open to undergraduates.

Fall RELS2100H S01 17172 Th 4:00-6:20(13) (R. Kraemer)

2150 Targumic Aramaic
Introduction to Targumic Aramaic grammar with readings from Targum Ongelos. Assumes knowledge of Hebrew.

Fall RELS2150 S01 17025 W 5:30-7:30(18)

2160 Aramaic Readings
A survey of epigraphic and biblical Aramaic intended for doctoral students and others with sufficient background in Aramaic grammar.

Spr RELS2160 S01 26410 W 5:30-7:20(18) (S. Olyan)

2200Q Readings in Syriac
Dramatic narratives in liturgical poetry. Readings from Cyrillonas and Jacob of Serug.

Fall RELS2200Q S01 17035 Th 1:00-3:20(10) (S. Harvey)

2400 Seminar in Religion in the Ancient Mediterranean

2400A Jewish and Christian Women in Greco-Roman Antiquity
A professional introduction to the textual, documentary and inscriptive evidence for Jewish and Christian women in the Greco-Roman Mediterranean, with particular attention to methodological and theoretical issues.

Spr RELS2400A S01 26411 W 3:00-5:20(14) (R. Kraemer)

2600 Religion, Culture, Thought: Seminar

2600E Seminar in Religion and Critical Thought: Hegel

Spr RELS2600E S01 26412 W 3:00-5:20(14) (T. Lewis)

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 10907 "To Be Arranged" Spr RELS2890 S01 20697 "To Be Arranged"

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. Instructor's permission required.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Fall; Spr

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  10922  ‘To Be Arranged’
Spr  RELS2990  S01  20712  ‘To Be Arranged’

Renaissance and Early Modern Studies
(Primarily for Undergraduates)

0250F  Shakespeare’s Present Tense (ENGL 0250F)
Interested students must register for ENGL 0250F S01 (CRN 14014).

0250G  The Green Renaissance (ENGL 0250G)
Interested students must register for ENGL 0250G S01 (CRN 16821).

0400A  Introduction to Shakespeare (ENGL 0400A)
Interested students must register for ENGL 0400A S01 (CRN 11418).

0550  Florence and Tuscany in the Fifteenth Century (HIAA 0550)
Interested students must register for HIAA 0550 S01 (CRN 16866).

0560  The Visual Culture of Early Modern Rome (HIAA 0560)
Interested students must register for HIAA 0560 S01 (CRN 26627).

0650  Eighteenth-Century Art-Imagining the Global Eighteenth-Century (HIAA 0650)
Interested students must register for HIAA 0650 S01 (CRN 26628).

0720A  From Courtly Love to Postmodern Desire (FREN 0720A)
Interested students must register for FREN 0720A S01 (CRN 26477).

0990L  Jews Between Christians and Moslems in the Early Modern World (JUDS 0990L)
Interested students must register for JUDS 0990L S01 (CRN 26776).

(Primarily for Graduates)

1980  Independent Study in REMS
Tutorial instruction on a topic in the Renaissance or early modern period, supervised by a member of the core faculty. This number may be used by concentrators for the required Independent Project undertaken in the junior or senior year. Section numbers vary by professor; instructor permission required.

Fall; Spr

2130F  Façons d’aimer: Discourses of Sexuality in Early Modern France (FREN 2130F)
Interested students must register for FREN 2130F S01 (CRN 26781).

Science and Society
(Primarily for Undergraduates)

0050D  Astrology, Magic, and Science (JUDS 0050D)
Interested students must register for JUDS 0050D S01 (CRN 16742).

Interested students must register for ENVS 0110 S01 (CRN 16037) and C01 (CRN 16788).

0130  Critical Reading and Writing II: The Research Essay (ENGL 0130)
Interested students must register for ENGL 0130 S01 (CRN 11415, 11475, or 15398 for fall 2011; CRN 21070 or 21071 for spring 2012).

0210  Science, Perception and Reality (PHIL 0210)
Interested students must register for PHIL 0210 S01 (CRN 16796).

0230  Digital Media (MCM 0230)
Interested students must register for MCM 0230 S01 (CRN 16834).

0300  Culture and Health (ANTH 0300)
Interested students must register for ANTH 0300 S01 (CRN 14352).

0360  Early Modern Philosophy (PHIL 0360)
Interested students must register for PHIL 0360 S01 (CRN 16797).

0510  Problems in International Environmental Policy (ENVS 0510)
Interested students must register for ENVS 0510 S01 (CRN 14636).

0700  Psychoactive Drugs and Society (NEUR 0700)
Interested students must register for NEUR 0700 S01 (CRN 26272).

0910  On the Dawn of Modernity (POBS 0910)
Interested students must register for POBS 0910 S01 (CRN 16712).

0990J  Body and Society: Medicine and Medical Ethics in the Pre-modern World (JUDS 0990J)
Interested students must register for JUDS 0990J S01 (CRN 26475).

(For Undergraduates and Graduates)

1010  Classical Sociological Theory (SOC 1010)
Interested students must register for SOC 1010 S01 (CRN 16726).
178 / Slavic Languages

1250 Perceptions of Mental Illness (SOC 1250)
Interested students must register for SOC 1250 S01 (CRN 16728).

1401 Sustainable Design in the Built Environment (ENVS 1400)
Interested students must register for ENVS 1400 S01 (CRN 13329).

1410 Environmental Law and Policy (ENVS 1410)
Interested students must register for ENVS 1410 S01 (CRN 21258).

1490 History of Medicine I: Medical Traditions in the Old World Before 1700 (HIST 1490)
Interested students must register for HIST 1490 S01 (CRN 15497).

1550 Topics in Science and Society
Seminars devoted to special topics which will vary from year to year. Enrollment is limited to 20. SCSO 1400 is suggested but not required. Written permission of the instructor required. May be repeated for credit.

1550E Science and Religion
An examination of relationships between science and religion. Topics will include: what is science?, what is religion?, are science and religion necessarily in conflict, or are they independent or perhaps mutually sustaining and complementary institutions?, what is the importance of developments in science (e.g., cosmology, particle physics, evolutionary theory, cognitive neuroscience) for religious beliefs about deities, human nature, morality, and the place of humans in the world?, how are tensions between science and religion manifested in contemporary cultural debates (e.g., science education, sex education, abortion, cloning, terrorism)? Enrollment limited to 20. SCSO 1400 recommended but not required. Instructor permission required. Instructor's permission required. DVPSS LILE
Spr SCS1550E S01 25764 T 4:00-6:20(16) (J. Poland)

1551 Nature, Culture, History and the Environment: the Humanistic Lens (ENVS 1550)
Interested students must register for ENVS 1550 S01 (CRN 26752).

1560 Sustenance + Sustainability: Exploring Nexus of Agro-Food Systems, Society, Environment (ENVS 1560)
Interested students must register for ENVS 1560 S01 (CRN 25899).

1590 Philosophy of Science (PHIL 1590)
Interested students must register for PHIL 1590 S01 (CRN 23904).

1620 Philosophy of Quantum Mechanics (PHIL 1620)
Interested students must register for PHIL 1620 S01 (CRN 26541).

1701G Science and Technology Policy in the Global South (PPAI 1701G)
Interested students must register for PPAI 1701G S01 (CRN 14715).

1720 Environmental Justice: Science/Political Economy of Environmental Health, Social Justice (ENVS 1720)
Interested students must register for ENVS 1720 S01 (CRN 26191).

1740 Politics of Food (POLS 1740)
Interested students must register for POLS 1740 S01 (CRN 24227).

1870 Contested Environmental Illness-Research Seminar (SOC 1870)
Interested students must register for SOC 1870I S01 (CRN 16733).

1871O Law, Innovation and Entrepreneurship (SOC 1871O)
Interested students must register for SOC 1871O S01 (CRN 16737).

1920B Health Inequality in Historical Perspective (BIOL 1920B)
Interested students must register for BIOL 1920B S01 (CRN 15668).

1970 Independent Study in Science and Society
Independent reading and research work in Science and Society is available to students who have completed introductory and intermediate level work in Science and Society. A decision to enroll must be made via consultation with the concentration advisor and the faculty advisor for the course. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Prerequisite: SCSO 1400. Open to junior and senior concentrators in Science and Society; instructor permission required. S/NC. Instructor's permission required. Fall

1971 Independent Study in Science and Society
Independent reading and research work in Science and Society is available to students who have completed introductory and intermediate level work in Science and Society. A decision to enroll must be made via consultation with the concentration advisor and the faculty advisor for the course. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Prerequisite: SCSO 1400. Open to junior and senior concentrators in Science and Society; instructor permission required. Instructor's permission required. Spr

Interested students must register for HIST 1972J S01 (CRN 26688).

(Primarily for Graduates)

2120 Historiography of Exact Sciences (AWAS 2120)
Interested students must register for AWAS 2120 S01 (CRN 16643).

2303 Anthropology of Fertility and Reproduction (ANTH 2303)
Interested students must register for ANTH 2303 S01 (CRN 17094).

2310A Ancient Scientific Texts: Akkadian (AWAS 2310A)
Interested students must register for AWAS 2310A S01 (CRN 24238).

2700 Special Topics in Ancient Sciences (AWAS 2700)
Interested students must register for AWAS 2700 S01 (CRN 16645).

American Sign Language see Center for Language Studies

Slavic Languages

Czech

(Primarily for Undergraduates)

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. Four meetings per week and use of audio/visual materials.
Fall CZCH0100 S01 10987 MWF 12:00-12:50(12) (M. Fidler)

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. Four meetings per week and use of audio/visual materials.
Spr CZCH0200 S01 20725 MWF 12:00-12:50(05) (M. Fidler)
0410  Topics in Czech Language and Culture
Examines aspects of Czech culture as manifested in history, literature, journalistic writing, and film. An equally important aim is to develop students’ written and oral expression beyond everyday discourse. Prerequisite CZCH 0200 or placement test.

0410C  Czech View of Self and Others
This course examines the Czech view of themselves as well as others, one of the most debated topics in the current context of expanding European Union. The centerpiece of the course is a film about a man-eating flower (animated by Jan Švankmajer) invented by a crazy scientist. The story unfolds in Prague, involving a peace-loving Czech botanist anad his daughter, the American detective Nick Carter (played by a Slovak actor), and the Czech police enforcement. The film is a treasure box of symbolic representations of Czechs and people Czechs view as others. Reading materials are drawn from literary and journalistic texts. Equal emphasis on the acquisition of language, including exposure to Colloquial Czech. Separate language tasks for students of two proficiency levels (2nd and 3rd year). Conducted in Czech. The course is for students who completed CZCH 0200 or the equivalent.

Fall CZCH0410C  S01  16881  "To Be Arranged"  (M. Fidler)

0610  Topics Course on War, Revolution and National Identity in Czech Culture
Explores war, revolution, and the issue of national identity in Czech culture and history from various angles as manifested in literary and journalistic texts, art, music, and films. Use of authentic materials. Discussion in Czech. An ancillary aim is to develop advanced language skills. Prerequisite: CZCH 0410 or placement test.

0610C  Czech Cultural Icons, Emblems, and National Identity
The "most famous Czech" Jára Cimrman and his most active period, namely the late 19th to early 20th-century Bohemia. Highlights of Czech cultural icons and emblems, and discussions on what constitutes Czech national identity reflected in the Cimrman phenomenon. Readings on several Czech cultural icons. Two different sets of requirements for students of two language proficiency levels. The course is for students who have completed CZCH 0410 or the equivalent.

Spr CZCH0610C  S01  20738  "To Be Arranged"

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.

Spr RUSS0200  S01  20730  MWF 9:00-9:50 & TTh 12:00-12:50(02)  (L. Debenedette)

0250  Introductory Russian in St. Petersburg
Intensive introductory language and culture taught in St. Petersburg, Russia, meeting 15 hours per week. Students develop communicative and cultural competence in Russian, emphasizing 1) culture of everyday life in Russia and 2) life in St. Petersburg. For students without previous study of Russian.

Sum RUSS0250  S01  60241  "To Be Arranged"  (L. Debenedette)

0300  Intermediate Russian
Continues development of language proficiency while broadening understanding of contemporary Russian culture via readings in literature and history. Expansion of vocabulary for dealing with conversational topics and review of Russian grammar. Features literary and nonliterary readings in Russian, as well as video and computer resources. Five class meetings per week. Prerequisite: RUSS 0110 or RUSS 0200 or RUSS 0250 or placement by exam.

Fall RUSS300  S01  10991  MWF 11:00-11:50 & TTh 9:30-10:20(04)  (L. Debenedette)

0320  Freshman Seminar
Enrollment limited to 20 first year students. FYS

0320C  Demons and Angels in Russian Literature
The literary images of fallen angels, as well as various poetic demonologies in Russian literature extend from the medieval apocrypha, up to famous works of the twentieth-century literature, like, for example, Bulgakov's Master and Margarita or Dostoevsky's Demons. Although, the Russian literary angels are in many respects related to their Western counterparts, the apocalyptic character of Russian spiritual culture makes them in many respects unique. Examining these images, the course addresses the important questions concerning the human condition in general. Angels as one critic said, "represent something that was ours and that we have the potential to become again"; their essence is otherness. Consequently, their literary representations explore the possibilities of human existence as well as its central paradigms like, love, rebirth, mortality, or 'fallenness.' The course will analyze the images of angels and fallen angels (devils) in the works of the nineteenth and the twentieth-century Russian prose, visual art, and film – from romanticism to 'postmodernism' - in the context of the world literature and culture. Authors to be studied: Byron, Lermontov, Balzac, Dostoievski, Sologub, Bulgakov, Nabokov, Erofeev. We will also discuss films by Tarkovskii and Wenders, Russian icons, and paintings by Vrubel. In English. Enrollment limited to 20 first year students. DVPS FYS LILE

Fall RUSS3020C  S01  17131  W 3:00-5:20(14)  (M. Oklot)

0320D  The Tolstoy Event: War and Peace
A close reading of Tolstoy's major novel, with a focus on its interweaving of fictional and historical narrative and metahistorical discourse. Attention to issues of genre (e.g. the tension between "epic and novel"), literary tradition, the poetics of time and space, as well as his iconoclastic ideas about narrative, art, religion, and society. Tolstoy's formal innovation will be considered in a broader historical and cultural context. Selected readings in Bakhtin, Lukacs, Shklovsky, Eikhenbaum, Hayden White and others. Enrollment limited to 20 first year students. FYS

Fall RUSS3020D  S01  17051  M 3:00-5:20(13)  (S. Evdokimova)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
180 / Slavic Languages

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

Spr RUSS0320E S01 26768 W 3:00-5:20(14) (V. Golstein)

0350 Intermediate Russian in St. Petersburg
Intensive intermediate language and culture taught in St. Petersburg, Russia meeting 15 hours a week. Development of communicative and cultural competence in Russian, emphasizing 1) descriptive and narrative texts and 2) culture and history of St. Petersburg. Prerequisite: RUSS 0110 or 0200, or equivalent.

Sum RUSS0350 S01 60242 ‘To Be Arranged’ (L. Debenedette)

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.

Spr RUSS0400 S01 20732 MWF 10:00-10:50 & TTh 9:30-10:20(03) (L. Debenedette)

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.

Fall RUSS0500 S01 10992 MWF 1:00-1:50 & TTh 2:30-3:50(06) (L. Debenedette)

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.

Spr RUSS0600 S01 20733 MWF 1:00-1:50 & TTh 2:30-3:50(06) (L. Debenedette)

0930 Cultures and Literatures of the Russian and Soviet Empires
Examines in depth various topics that constituted the cultural and literary landscape of the Soviet Union, examining their antecedents in the Russian empire and their reemergence in the post-Soviet world. Topics include: the Caucasus, from Tolstoy to modern Chechnya; Orientalism; the Civil War and Pasternak; Akhmatova and the experience of the totalitarian state.

Spr RUSS0930 S01 25788 MWF 12:00-12:50(05) (C. Carey)

0990 The Black Experience in Russia and the Soviet Union
A study of the African-American experience in Russia and the Soviet Union through the prism of autobiographies, biographies, diaries, travel journals, and memoirs from the 18th century to the present, of actors, American Communists, domestic servants, journalists, musicians, poets, political activists, publishers, stage designers, students and writers, including W.E.B. Du Bois, Harry Haywood, Langston Hughes, Paul Robeson and Richard Wright.

Fall RUSS0990 S01 10994 MWF 12:00-12:50(12) (C. Carey)

(For Undergraduates and Graduates)

1050 Russian Culture: From Peter The Great to Putin
An interdisciplinary exploration of Russian cultural history through its literature, art, religion, social and political thought, and film. An examination of a wide range of cultural expressions: religious and civic rituals, values and practices, social customs and popular entertainment. In English.

Fall RUSS1050 S01 10995 MWF 10:00-10:50(03) (V. Golstein)

1060 St. Petersburg: A Window on Russia
An interdisciplinary exploration of Russian cultural history through its literature, art, architecture, religion, social and political thought, theater and ballet. Elements of Russian culture will be presented through the prism of the city of St. Petersburg, its history, its urban and cultural landscapes. Regular field trips to museums, theater, and city tours focused on specific themes.

Sum RUSS1060 S01 60243 ‘To Be Arranged’ (A. Levitsky)

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.

Fall RUSS1110 S01 10996 ‘To Be Arranged’

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.

Spr RUSS1120 S01 20735 ‘To Be Arranged’

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 20736 TTh 10:30-11:50(09) (A. Levitsky)

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, Lemontov, Gogol, Turgenev, Leskov, and Dostoevsky. Lectures and discussion. No knowledge of Russian required. Discussion sections to be arranged.

Fall RUSS1290 S01 10997 TTh 10:30-11:50(09) (A. Levitsky)

1300 Russian Literature in Translation II: Tolstoy to Solzhenitsyn
Survey of major works of Russian literature of the late 19th and 20th centuries. Traces the development of Russian literature from realism to symbolism and decadence, from revolutionary experiments to socialist realism and dissent. Authors to be studied include Tolstoy, Chekhov, Solzhenitxyn. Lectures and discussion. No knowledge of Russian required. WRIT

Spr RUSS1300 S01 25671 TTh 1:00-2:20(10) (V. Golstein)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
1320 Soviet Literature from 1917 to 1953
Survey of Soviet literature in translation from the revolution to the death of Stalin. Includes Russian literature and the literary milieu of the NEP period, literature of the Thirties, and literature written during the Second World War and the postwar period. Texts by Akhmatova, Babel, Blok, Bulgakov, Ivanov, Lavrentyov, Mandelstam, Mayakovsky, Pasternak, Pilnyak, Shklovsky, and Zamiatin.

Fall RUSS1320 S01 10998 MWF 2:00-2:50(07) (C. Carey)

1330 Soviet and Post-Soviet Literature (1953 to Present)
A survey of contemporary Soviet and post-Soviet literature in translation from the death of Stalin through the Glastnost era to the present. Includes prose writers and poets as well as women writers and authors from non-Russian republics. Texts by Altmatov, Aksyonov, Bilov, Evtushenko, Ibragimbekov, Iskander, Makine, Makanin, Nabokov, Petrushevskaya, Rasputin, Shklovsky, Sokolov, Soloukhin, Solzhenitsyn, Tolstaya, Trifonov, Ulitkskaya.

Spr RUSS1330 S01 25789 MWF 2:00-2:50(07) (C. Carey)

1340 The Russian Novel
Mikhail Bulgakov's Master and Margarita, Andrei Bely's Petersburg, and Fedor Sologub's Petty Demon are read in depth as 20th-century milestones in the development of Russian novel—particularly as continuation and reaction to the prose of Nikolai Gogol and Fedor Dostoevskii, which opens the course. Other authors included in the course: Nabokov, Platonov, Evreinev. In English.

Spr RUSS1340 S01 26639 TTh 9:00-10:20(08) (M. Oklot)

1450 Love, Adultery, and Sexuality
Literary representations of love, marriage, adultery, and sexuality. Examines the formation of the notion of passionate romantic love, the myths of femininity, and various concepts of love and family. Emphasizes the way in which the notions of love and sexuality are linked to national identity. Readings include several Russian popular and revolutionary feminist writers as well as such classics as Rousseau, Racine, Pushkin, Flaubert, Tolstoy, Chekhov, and Kate Chopin.

Spr RUSS1450 S01 26640 TTh 2:30-3:50(11) (S. Evdokimova)

1800 Pushkin
For generations of Russian readers and writers, Pushkin has been a cult figure, a true "national poet." This course focuses on Pushkin as the progenitor of Russian national mythology and examines the seminal nature of his writing. Analysis of the dazzling array of genres which became his greatest achievement: lyric poetry, narrative poetry, novel in verse, prose, drama, history, and other nonfictional narratives. Enrollment limited to 20.

Fall RUSS1800 S01 17132 Th 4:00-6:20(13) (S. Evdokimova)

1840 Nabokov
The course examines Vladimir Nabokov’s (1899-1977) major achievements in prose in both Russian and American periods, paying particular attention to their cultural context (Russian émigré culture of the 1920s and 30s); the questions of his aesthetics, ethics, and metaphysics, as well as his engagement in the dialogue with other European modernist writers, especially with the existentialists. Readings include Nabokov's selected short stories and novels, such as The Defense, Invitation to a Beheading, Despair, The Eye The Gift, Pnin, or Lolita. In English. DVPS LILE

Fall RUSS1840 S01 17133 TTh 1:00-2:20(10) (M. Oklot)

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 for the correct section number and CRN to use when registering for this course. Each section limited to 10 students; instructor permission required.
Fall; Spr

(Primarily for Graduates)

2410 Movements and Genres in Russian Literary Culture
Seminar. Critical reading of selected texts from the Baroque period through the first half of the 19th century. Analysis is based on a study of the infrastructure of each work and the external influences of the period. Conducted mainly in Russian, with a focus on Russian critical terminology and approaches.

Fall RUSS2410 S01 17134 W 3:00-5:20(14) (A. Levitsky)

2610 Seminar in Russian Literature

2610D Pushkin
Fall RUSS2610D S01 17022 *To Be Arranged* (S. Evdokimova)

2720 Seminar in Russian Literature

2720D Derzhavin and His Epoch
Spr RUSS2720D S01 26160 W 3:00-5:20(14) (A. Levitsky)

2810 Russian Poetry: Silver Age
Exploration of the writings of a number of spectacular Russian poets: Blok, Tsvetaeva, Pasternak, Mandelstam – in the context of social and cultural changes that shook Russia in first few 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 undergraduates, i.e. to those who can read about thirty pages of poetry per week (in original). Instructor permission required.

Fall RUSS2810 S01 17176 M 3:00-5:20(13) (V. Golstein)

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 10999 "To Be Arranged"
Spr RUSS2970 S01 20738 "To Be Arranged"

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.
Fall; Spr

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 11000 "To Be Arranged"
Spr RUSS2990 S01 20739 "To Be Arranged"

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
1981 Independent Research in the Slavic Language(s)
Independent research on various topics in Slavic cultures. Reading, discussion, research must be done in the chosen Slavic language (Czech/Russian). Close work with faculty on project is expected. Prerequisites: minimum RUSS0600/CZCH 0610 (3rd year-level) or placement evaluation by Russian or Czech language coordinator. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the Concentration Advisor and Chair of the department (deadline: the last day of Add a course without fee period during the semester when the project is undertaken). 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.
Fall; Spr

1990 Senior Thesis
Only for Slavic concentrators writing their senior theses. For requirements and schedule, contact the department. Each section limited to 10 senior Slavic Studies concentrators. Instructor’s permission required.
Fall; Spr

(Social Psychology)
This course will examine the selected major works of East European literature, theatre, and film in the context of West European and Russian literatures, giving special attention to the Polish writer, Witold Gombrowicz and the Czech writer, Milan Kundera. The works included in this course will be analyzed, first of all, as artistic responses to the crisis of cultural identity inflicting the whole Europe of the twentieth century. Other included authors: Schulz, Babel, Broch, Witkacy, Platonov, Ungar, Leppin, Kantor, Kiš, Milosz. Enrollment limited to 20. In English. DVPS LILE
Spr SLAV1790 S01 26895 Th 4:00-6:20(16) (M. Oklot)

3990 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 11039 'To Be Arranged'
Spr SLAV2990 S01 20769 'To Be Arranged'

Spring XLIST Courses of Interest to Concentrators in Slavic Languages
The following courses may be of interest to Slavic Languages concentrators. Please see the sponsoring department for the time and location of each course.

History
HIST 1410 Modern Russia to the Revolution
HIST 1552 Early Modern Globalization
HIST 1973Q Stalinism

International Relations
INTL 1280 Global Security After the Cold War
INTL 1800R Post Soviet States from the Past into the Future

Political Science
POLS 1220 Politics of the Post-Soviet States

Sociology
(Primarily for Undergraduates)

0010 Perspectives on Society
An introduction to the discipline of sociology from a macro perspective. Students explore how different sociological paradigms lead to contrasting understandings of capitalism, the state, class, race, and gender. In addition, students learn new ways to think about social problems in the United States, in the developing world, and in world history.
Spr SOC0010 S01 24096 MWF 1:00-1:50(06) (N. Luke)

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. Students MUST register for a conference, and a lecture section.
Fall SOC0020 S01 14169 MWF 2:00-2:50(07) (G. Elliott)

0111 Social Change, Dictatorship, and Democracy
Why are some countries more democratic than others? What effects have industrialization and colonization had on developing world democracies? This class probes those questions from a comparative and sociological perspective. We will explore the relationship between
political regimes and socioeconomic factors, like class relations, state-led development, and racial and ethnic tensions. We will look at the contrasting political and social trajectories of European nations, the United States, East Asia, and Latin America in particular, using historical texts, sociological theory, novels, and films. This course will be of interest to student concentrators in the social sciences, particularly sociology, political science, anthropology, and economics, as well as students interested in Latin America and Asia. A foundational course in any social science field is recommended, and for high school students, AP U.S. History or AP Comparative Politics is required.

Spr SOC0170 S01 24515 MWF 11:00-11:50(04) (C. Spearin)

0150 Economic Development and Social Change
Emphasis on understanding the interrelations among economic, political, and cultural aspects of change in developing countries. The experience of currently developing nations is contrasted to that of nations which industrialized in the 19th century. Compares the different development strategies which have been adopted by currently developing nations and their consequences for social change.

Fall SOC0150 S01 10447 MWF 12:00-12:50(12) (P. Henry)

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 stepparenthood, as well as changing patterns of work and housework. Instructor permission required.

Spr SOC0170 S01 24515 MWF 11:00-11:50(04) (C. Spearin)

0230 Sex, Gender, and Society
An introduction to the sociological study of sex and gender. More specifically, this course explores how sexuality is perceived, defined, and experienced in the context of society. How sexuality influences our lives, is reflected in social norms, attitudes and beliefs, through public and private policies and practices, and the social institutions is also investigated. This class also focuses on how prevalent gender differences really are in our society and examines the social construction of gender.

Fall SOC0230 S01 16725 MWF 11:00-11:50(04) (C. Spearin)

0240 The Nature of Community: Place, Space, and Identity
What is a community? How can it best be organized and strengthened? How can communities contribute to social justice? This course examines boundaries and identities, rights, responsibilities, cooperation and conflict, and the roles of voluntarism, sports, stories, language, meals and even sleep in community life. Concern about the nature and well-being of "community" has been at the heart of sociology since the discipline was born, so examining these issues provides an in-depth introduction to the sociological way of thinking. The course is particularly aimed at those working within community settings, such as residential units, student activities, and service programs.

Spr SOC0240 S01 25242 MWF 12:00-12:50(05) (A. Dill)

0300 First Year Seminars
These seminars, limited to 20 freshman only, are intended to introduce students to sociology (no background in sociology is required.) Seminars provide students an opportunity to read, discuss, and produce sociological work in an environment that allows for significant interaction with the teaching faculty. These courses carry full credit in the sociology concentration program. FYS WRIT

0300D Who Am I?
A study of self in contemporary society. We examine the structural and situational forces that shape the self and their impact on personal development, orientations to the world, and interpersonal behavior; we investigate the development of the self as a way of being in the world that makes everyday doings and, ultimately, society, possible. Enrollment limited to 20 first year students. FYS WRIT

Spr SOC0300D S01 26503 TTh 9:00-10:10(08) (G. Elliott)

0300E HIV/AIDS: Politics, Culture and Society
The current HIV/AIDS crisis is not merely medical. It also involves fundamental political, social and economic issues. Through extensive readings, class discussions and the writing of research papers, we will explore issues such as, what are the sociological barriers to changing sexual behavior? Why do some government, but not others, fail to commit resources to fight the disease? How was improved access to expensive drugs achieved? Instructor permission required. Enrollment limited to 20 first year students. FYS WRIT

Spr SOC0300E S01 26505 W 3:00-5:20(14) (N. Chorev)

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

Spr SOC0300F S01 26506 Th 4:00-6:20(16) (M. Jackson)

0300G Populations in Danger
Examines populations confronted with dangerous social, economic, political, or health crises. These include small Amazon farmers in situations of environmental degradation, Catholics and Protestants in Northern Ireland in economic and social conflict and under peace agreement, Israelis under threat of random attack with neighbors who demand Israel's extinction, Palestinians under Israeli occupation with a largely powerless and corrupt Palestinian Authority, South Africans under HIV/AIDS pandemic, and undocumented Dominican immigrants in Providence. The seminar will include readings on these populations in danger, lectures by internationally known experts, student presentations and class discussion, and three short essays. Enrollment limited to 20 first year students. FYS WRIT

Spr SOC0300G S01 25233 W 3:00-5:20(14) (D. Hogan)

0300K Inequalities and Health
We start from the assumption that the social organization of society shapes definitions and experiences of health and illness, the distribution of diseases, and the responses to them. We explore the relevance of social structure and social interaction to health and well-being, emphasizing socioeconomic status, race, ethnicity, gender, and social contexts such as relationships, families, schools, and neighborhoods. This is not a "sociology of medicine" course. It will not emphasize the profession of medicine, health care policy, or health care organizations. Enrollment limited to 20 first year students. FYS WRIT

Spr SOC0300K S01 26504 F 3:00-5:20(15) (S. Short)

(For Undergraduates and Graduates)

1010 Classical Sociological Theory
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

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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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. First-year students require instructor permission. WRIT

Fall SOC1010 S01 16726 TTh 1:00-2:20(10) (N. Chorev)

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.

Fall SOC1020 S01 16727 MWF 1:00-1:50(06) (E. Bridwell-Mitchell)

1030 Organizational Theories of the Public and Private Sectors

This course is a general introduction to the study of organizations from a macro-sociological perspective. Rather than examining the attitudes, actions, and interactions of individuals inside organizations, this course focuses on organizational systems and structures, their environments, and their significance in society. Topics include social, cultural, political and economic processes in organizations, issues of organizational learning, change and life cycles, inter-organizational dynamics such as alliances, and organizational networks, and topics related to power, equity and diversity.

Fall SOC1030 S01 10456 TTh 10:30-11:50(09) (M. Suchman)

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.

Spr SOC1060 S01 25776 TTh 6:30-7:50(12)

1080 Groups in Organizations

Teamwork has become increasingly popular in organizations. Whether structured into the organizational makeup, or temporarily established around specific projects, teams are a critical competency of organizations. They are considered an effective performance unit, and expected to efficiently cope with the fast changes and demands of today's corporate environment. However, deriving the full benefits from teamwork requires correct management of its processes and dynamics. This course dwells on selected issues in team development, internal processes, and members' behavior, as well as management skills needed to effectively lead teams; therefore it can benefit anyone who works in a group, whether as a student or in the business world. Enrollment limited to 35.

Fall SOC1080 S01 15931 TTh 6:30-7:50(12)

1100 Introductory Statistics for Social Research

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. Students MUST register for a conference, and a lecture section.

Fall SOC1100 S01 10459 MWF 10:00-10:50(03) (C. Spearin)
Spr SOC1100 S01 20363 TTh 9:00-10:20(08) (D. Lindstrom)

1114 Law and Society

A broad exploration of contemporary social-science scholarship on law and legal institutions, covering competing theoretical perspectives and drawing examples from diverse empirical settings. Lectures and discussions survey different ways in which social scientists study legal life, seeking contrasts and commonalities across the various perspectives. Coverage includes: Social-psychological models of rule-following and rule-breaking; social-structural linkages between law and the economy, stratification, and politics; and the dynamic relationship between law and social change—including the role of lawyers, judges and juries in giving law “independent causal significance.” Strongly recommended: previous coursework in the social sciences.

Spr SOC1114 S01 26509 TTh 10:30-11:50(09) (M. Suchman)

1250 Perceptions of Mental Illness

This interdisciplinary course centers on the need to understand mental illness in a broad social context. It covers personal experience of mental illness, history of psychiatric concepts and treatment, politics of diagnosis, mental health policy and deinstitutionalization, public attitudes toward mental illness, social factors and epidemiology of mental illness, and links between mental illness and creativity. There is much attention to artistic perceptions of mental illness through fiction, memoirs, drama, music, and art. Instructor permission required.

Fall SOC1250 S01 16728 MWF 10:00-10:50(03) (P. Brown)

1410 Aging and the Quality of Life

Provides a broad-based knowledge of the aging process and its impact on the quality of life of elders. Explores physical, psychological, social, cultural factors. Assesses different approaches to meeting needs of elders and provides high quality care and examines consequences of an aging population for social institutions. Prerequisites: SOC 0010 or 0020 and PHP 0070 or 0310, or permission of the instructor.

Fall SOC1410 S01 16729 MWF 11:00-11:50(04) (A. Dill)

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, wherein social 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.

Fall SOC1420 S01 16730 TTh 9:00-10:20(08) (G. Elliott)

1430 Social Structure and Personal Development

The relationship between one's place in the social structure and one's own personal growth. Investigates the social aspects of individual growth and change throughout the life course. Also examines social factors involved in the failure to find a meaningful place for oneself in society.

Spr SOC1430 S01 26512 TTh 2:30-3:50(11) (G. Elliott)

1550 Sociology of Medicine

The sociopolitical context within which health, illness, and medical care are defined. Sociological materials are used to examine current developments in the health care field. Emphasis on identifying social and political forces that impinge upon the delivery systems and tracing their impact on the roles of practitioners and the health of their clients.

Spr SOC1550 S01 24099 MWF 9:00-9:50(02) (A. Dill)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
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
Spr SOC1620 S01 26516 TTh 10:30-11:50(09) (P. Heller)

1650 Unequal Societies
This course compares nation-states in terms of various forms of inequality and assesses theories explaining international inequalities. It examines why poverty, income inequality, and poor health are greater in the United States than in comparably affluent countries, why intergenerational mobility varies, and why some societies treat women more equally or are more accepting of immigrants and cultural minorities than others. It asks whether the high standard of living in the Global North comes at the expense of the Global South. What holds unequal societies together and pulls them apart? Can inequalities be reduced?
Spr SOC1650 S01 26518 TTh 1:00-2:20(10) (H. Silver)

1870 Seminars
Open to juniors, seniors, and graduate students with instructor's consent. Note that some 2000-level seminars are open to qualified undergraduates and may count for concentration credit. Enrollment limited to 20. WRIT

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. This course explores philanthropic strategies, social change, and the sociological dimensions of philanthropy in historic and current practice. Students engage in teams to investigate a particular community concern, design an investment strategy, and recommend the investment of grant dollars. Course enrollment is by application only. Applications can be found at swearencenter.brown.edu shortly before the start of class. Students who pre-register must still complete the application process and attend the first class meeting. Instructor permission required. Enrollment limited to 12. WRIT
Fall SOC1870A S01 14425 TTh 1:00-2:20(10) (A. Dill)

1870I Contested Environmental Illness-Research Seminar
Examines "contested illnesses," focusing on environmental factors in Gulf War illnesses, asthma, breast cancer and other diseases. Students conduct interviews and do field work and document analysis to study law, scientific, and governmental perspectives. Examines how these disputes can lead to progress in disease detection and etiology, and in the development of less toxic products. WRIT
Fall SOC1870I S01 16733 W 3:00-5:20(14) (P. Brown)

1870L The Myth of Markets: Exploring the Social Side of Economics
Critically examines the relationship between economics and sociology. Aims to help students develop the knowledge and skills to critically observe, assess, and respond to important social and economic issues at the macro, meso and micro levels. Students also learn the skills of critical analysis and argumentation needed to form thoughtful opinion, take a critical position, or make a decision about important economic and social issues. Thus, students gain expertise as informed actors and advocates in the social and economic system. Prerequisites: SOC 1010, SOC 1030, ECON 0110, equivalents, or permission of the instructor. Enrollment limited to 20. WRIT
Fall SOC1870L S01 15470 W 3:00-5:20(14) (E. Bridwell-Mitchell)

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 24338 M 3:00-5:20(13) (J. Itzigsohn)

1871F Principles and Methods of Geographic Information Systems
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 15 juniors and seniors. Instructor permission required. WRIT
Fall SOC1871F S01 10478 T 4:00-6:20(13) (R. Franklin)

1871O Law, Innovation and Entrepreneurship
This seminar explores the relationship between legal institutions and macro-organizational change. The course devotes particular attention to the legal and organizational processes that shape (and are shaped by) the emergence of new technologies, new enterprises, and new industries. Although discussions may touch on technical aspects of law and/or entrepreneurship, most topics and materials focus on the general sociological processes that underlie changing organizational environments. The seminar is aimed at advanced students who have some prior familiarity with the sociology of law is helpful, but not essential. Through shared and individual readings, weekly discussions, and e-mail dialogues, the course provides an opportunity for students to refine and extend their thinking on important and controversial topics at the intersection of the contemporary organizational and socio-legal literatures. Prerequisite: SOC 1030 required (waivable by permission of instructor). Priority given to graduate students, seniors, and COE concentrators. Instructor's permission required. Enrollment limited to 20. WRIT
Fall SOC1871O S01 16737 M 3:00-5:20(13) (M. Suchman)

1871R Knowledge Networks and Global Transformation
How do refined knowledge and the social relations that organize and distribute it influence changes in the institutions, inequalities and cultural systems and practices that define particular world regions and global formations? How do global transformations influence the trajectories of knowledge production themselves? We will examine particular knowledge-identified agents, including universities, research institutes, think tanks, and professional associations, to consider why they approach global transformations in the way that they do. And we will consider how particular kinds of global transformations, from the end of the cold war and the transformation of information/communication technology to the last financial crisis, affect knowledge production itself. By exploring intersections between global complexity and reflexivity in this fashion, we hope to increase our own capacities for seeing the world not only as it is, but how knowledge might be used in making better alternatives for the future. Enrollment limited to 20 juniors and seniors. WRIT
Spr SOC1871R S01 26697 W 3:00-5:20(14) (M. Kennedy)

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, for complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
home ownership, and residential segregation. Enrollment limited to 30 juniors, seniors, and graduate students.

Spr  SOC1871V S01  26176  M 3:00-5:20(13)  (J. Logan)

1930 Social Entrepreneurship Capstone I
This is the first in a two-semester course sequence designed as an option to fulfill the Integrative Senior Experience for seniors in the Organizational Studies track of COE. The course will build on concepts studied in SOC 1030 and 1090, and will lead students to synthesize knowledge at several levels: synthesizing across disciplines, across theoretical understanding and practical application, and across private and public sector experiences of entrepreneurship. Students will be organized into client-mentored teams to work on social entrepreneurship projects. Registration requires an application and instructor approval. Enrollment limited to 24.

Fall  SOC1930 S01  16738  TTh 2:30-3:50(11)  (M. Fennell)

1940 Social Entrepreneurship Capstone II
Continuation of Semester 1, Social Entrepreneurship Capstone I: completion of client-mentored team projects begun in Semester 1. Registration requires an application and instructor approval if student did not complete Semester 1. Instructor’s permission required. Enrollment Limited to 24.

Spr  SOC1940 S01  26522  TTh 2:30-3:50(11)  (M. Fennell)

1950 Senior Seminar
Advanced research seminar for sociology concentrators in the second semester of 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

Spr  SOC1950 S01  20365  F 3:00-5:20(15)  (N. Luke)

1970 Individual Research Project
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. Instructor’s permission required.

Fall; Spr

1980 Senior Honors Thesis
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. Instructor’s permission required.

Fall

1990 Senior Honors Thesis
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. Instructor’s permission required.

Spr

(Primarily for Graduates)

2000 Theory and Research in Development
Interested students must register for DEVL 2000 S01 (CRN 10507).

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  13538  T 9:00-11:50(08)  (D. Lindstrom)

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  23481  T 9:00-11:50(08)  (L. Vanwey)

2040 Classical Sociological Theory
This is a graduate-level course requires students to engage in detailed analysis and critical review of sociological thought of the 19th and early 20th centuries. The class will introduce students to the critical thinking, methodological innovation, and historical imagination of sociological theory by reading the original texts of the forefathers of sociology, including Karl Marx, Max Weber, Emile Durkheim and others.

Fall  SOC2040 S01  13539  W 5:00-7:50(14)  (N. Chorev)

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  20366  T 1:00-3:50(11)  (J. Itzigsohn)

2060 Complex Organizations and Health Policy
Application of organizational theory to health care organizations, with special emphasis on the development of multi–organizational provider structures, health policy formulation and reform and the influence of regulations and technology on healthcare organization relationships. Written permission required for undergraduates.

Spr  SOC2060 S01  26527  Th 9:00-11:50(09)  (M. Fennell)

2080 Principles of Population
An advanced introduction to theoretical and substantive issues in the social scientific study of population. Major areas within sociology are integrated with the study of population, including the comparative–historical analysis of development, family processes, social stratification, ethnicity, ecological studies, and social policy. Primarily for first year Graduate students.

Fall  SOC2080 S01  15472  Th 2:00-4:50(11)  (N. Luke)

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  20367  W 2:00-4:50(07)  (P. Brown)

For complete, up-to-date course information please see or the Brown Course Search tool ([https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main](https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main)).
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.
Fall SOC2240 S01 16740 M 10:00-12:50(03) (D. Lindstrom)

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 10483 M 2:00-4:50(07) (S. Short)

2460 Sociology Paper Writing Seminar
This course is intended to improve writing skills that are especially relevant scholarship in Sociology. Key issues include the logical flow of ideas, awareness of the audience, clarity of expression, completeness, and (because these writing products will be peer reviewed) anticipation of potential reviewers' objections, and communicating what is new and interesting about the work. Students will be required to provide a draft of a paper or proposal that has potential to develop into a 25-35 page manuscript. The course is open to graduate students in sociology and to doctoral students in other programs by permission of the instructor. Enrollment limited to 12.
Fall SOC2460 S01 15473 W 9:00-11:50(02) (M. Fennell)

2500 Teaching Practicum in Sociology
Fall SOC2500 S01 10484 'To Be Arranged'

2510 Teaching Practicum in Sociology
Spr SOC2510 S01 24106 'To Be Arranged'

2600 Comparative Historical Analysis
The seminar focuses on the application of theory and method in historical sociology. It will combine the reading of exemplary works, both classical and current, in comparative-historical sociology, with an exploration of historical methods that involves methodological readings but focuses on students’ use of archives in their own individual research. For graduate students only. Enrollment limited to 20.
Spr SOC2600 S01 26528 W 9:00-11:50(03) (N. Chorev)

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 24107 M 9:00-11:50(03) (P. Heller)

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 10485 'To Be Arranged'
Spr SOC2970 S01 20368 'To Be Arranged'

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’s permission required.
Fall

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. Instructor’s permission required.
Spr

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. Reserved for certain concentrations; please check Banner for the list.
Fall SOC2990 S01 10486 'To Be Arranged'
Spr SOC2990 S01 20369 'To Be Arranged'

Fall XLIST Courses of Interest to Students Concentrating in Sociology
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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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Spring XLIST Courses of Interest to Students Concentrating in Sociology

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.

Development Studies
DEVL 2010 Theory and Research in Development II

Environmental Studies
ENVS 1920 Analysis and Resolution of Environmental Problems

Ethnic Studies
ETHN 1890A Seminar on Latino Politics in the United States

Judaic Studies
JUDS 1087 Israeli Society

Latin American Studies
LAST 1510J The Making of Modern Brazil

Philosophy
PHIL 2160H Disability, Fiction, and Bioethics

Urban Studies
URBN 1870B Business Networks in Asia

Swedish see German Studies

Theatre Arts and Performance Studies

(Primarily for Undergraduates)

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. Areas of emphasis vary with instructor. First year students only.

Please attend the introductory meeting for the Theatre Arts and Performance Studies Department for interview information. Interviews are conducted in the beginning of September after which placements for all sections in both fall and spring semesters will be decided. Applicants who miss the first interviews should contact the professor to schedule another time. Interview and written permission required. Enrollment limited to 18 first year students.

Fall  TAPS0030 S01 15738  TTh 3:00-5:20(13)
Fall  TAPS0030 S02 15739  TTh 9:30-11:50(09) (C. Crawford)
Spr  TAPS0030 S03 25562  TTh 3:00-5:20(16)
Spr  TAPS0030 S04 25563  TTh 9:30-11:50(09) (C. Crawford)

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 17 undergraduates per section. A limited number of spaces are reserved for incoming and transfer students. S/NC. WRIT

Sum  TAPS0100 S01 60371  T Th 1:30-5:30 (J. Waechter)
Fall TAPS0100 S01 15740  Th 3:00-5:20(13) (M. Namulyanga)
Spr TAPS0100 S01 25565  W 3:00-5:20(14) (V. Cazaeres)

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). S/NC. WRIT

Fall  TAPS0200 S01 15742  T 3:00-5:20(13) (V. Cazaeres)

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 (form is at http://www.brown.edu/Departments/Theatre_Speech_Dance/) and attend the first day of class. Attendance is mandatory. Enrollment is limited to 18.

The application/waitlist process does not apply to students registering for the Summer term through the Office of Continuing Education.

Sum  TAPS0220 S01 60331  MWF 1:00-3:40 (J. Dennen)
Sum  TAPS0220 S02 60358  MWF 1:00-3:40 (M. Carriger)
Fall TAPS0220 S01 15744  MW 9:00-11:50(02) (B. Tannenbaum)
Fall TAPS0220 S02 15745  MW 9:00-11:50(02) (B. Tannenbaum)
Fall TAPS0220 S03 15965  MW 9:00-11:50(02)
Fall TAPS0220 S04 15966  MW 9:00-11:50(06)
Spr  TAPS0220 S01 25571  MW 9:00-11:50(02) (B. Tannenbaum)
Spr  TAPS0220 S02 25572  MW 9:00-11:50(06) (B. Tannenbaum)
Spr  TAPS0220 S03 25814  MW 9:00-11:50(02)
Spr  TAPS0220 S04 25815  MW 1:00-3:50(06)

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.

Sum  TAPS0230 S01 60332  TWF 10:00-1:00 (K. Moore)
Fall  TAPS0230 S01 15746  MW 12:00-1:50 & TTh 1:00-2:20(10) (L. Marshall)
Fall  TAPS0230 S02 15967  MW 2:00-3:50 & TTh 2:30-3:50(11) (L. Marshall)
Spr  TAPS0230 S01 25574  MW 12:00-1:50 & TTh 1:00-2:20(10) (K. Moore)

0250 Introduction to Technical Theatre and Production

This course is an introduction to the basic principles of stagecraft, lighting and sound technology and the different elements of theatrical design. Instructor permission required. Enrollment limited to 15.

Fall  TAPS0250 S01 15747  MWF 10:00-11:50(03) (T. Hett)
Spr  TAPS0250 S01 25575  MW 10:00-11:50(03) (T. Hett)

0310 Beginning Modern Dance

Introduction to the art of movement. Focuses on building a common vocabulary based on ballet, vernacular forms, improvisation, Laban movement analysis, American modern dance, and the body therapies. Individual work is explored. One and one-half hours of class, four days a week. Enrollment limited to 40. S/NC.

Fall  TAPS0310 S01 15749  MTWTh 1:00-2:20(10) (M. Bach-Coulibaly)

0320 Dance Composition

Focuses on building the individual's creative voice. A movement vocabulary is developed from Western techniques (ballet, American modern dance, Laban/Bartenieff movement analysis, vernacular forms, space/harmony/movement physics, and the body therapies) along with group improvisations and collaboration with artists in other disciplines. Enrollment limited to 40. S/NC.

Fall  TAPS0320 S01 15750  MWF 10:00-11:50(03) (M. Bach-Coulibaly)
Theatre Arts and Performance Studies / 189

#### 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. Enrollment limited to 50. S/NC. Students MUST register for a conference, and a lecture section.

Spr TAPS0330 S01 26754 T 6:00-8:00 PM & Th 4:00-6:00(12) (M. Bach-Coulilbaly)

#### 0930 The Actor’s Instrument
Advanced vocal and physical technique for performers. Development of the actor’s voice and body with the goal of increasing their effective use as the means of artistic expression on the stage and, by extension, in the media. Emphasis will vary. Course may be repeated once for credit, with permission of TAPS concentration advisor. Prerequisite: TAPS 0230. Enrollment limited to 16. S/NC only.

#### 0930A The Actor’s Instrument: Voice and Speech
A complete and well-seasoned actor has the ability to perform with specificity and ease, both vocally and physically. Specificity comes from an integration of speech and movement technique. Ease is only possible when a mastery of technical skills reaches the point where the actor can integrate them without loss of spontaneity. This is a life long process that begins by learning the fundamentals of technique and the continual refinement of them on a personal level. The goal of this class is to give the student the fundamental techniques of voice and speech in relation to the body. In the event of over subscription, student will be enrolled on the basis of seniority. Prerequisite: TAPS 0230. Enrollment limited to 16. S/NC only.

Spr TAPS0930A S01 26342 MWF 4:00-5:50(13) (T. Jones)

#### 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. Enrollment limited to 18. Instructor’s permission required.

Fall TAPS0930C S01 15753 MW 11:00-1:50(04) (K. Moore)

#### 0960 Musical Theatre Topics
Individual topics may include: lyric writing, song writing, construction of libretti, and musical theatre production. Course may be repeated for credit, with permission of TAPS concentration advisor. Enrollment limited to 12. Permission of instructor required. S/NC only.

#### 0960A Musical Theatre Songwriting
A practical study in the creation of songs for the musical theatre. Students enrolled in this course will develop the skills necessary to write the music and lyrics for pieces intended for use in dramatic works. American and international musical theatre writers from the last eighty years will be studied and analyzed. Those enrolled may choose a focus of composition, lyric writing, or both. They will present and perform (or arrange performances of) new material (and rewritten material) each week to be examined by the class, culminating in a cabaret of new works. While beginners are encouraged to join, this is not a music theory course, and composers are expected to have a basic knowledge of theory (or self-taught skills). Enrollment limited to 10.

Fall TAPS0960A S01 15754 T 4:00-6:20(13) (A. Hertz)

#### 0960B Musical Theatre Writing Workshop
A practical study in the creation of new works for the American musical theatre. Students enrolled in this course will learn the craft of musical theatre writing, and will be able to workshop their material for their peers. Musicals from the last eighty years will be studied and analyzed. Those enrolled may choose a focus of composition, lyric writing, playwriting, or any combination thereof. Collaborators are welcome to work together in this class, and those looking for potential collaborators will be paired with other students if they so desire. While amateur composers are encouraged to join, this is not a music theory course, and composers are expected to have a basic knowledge of theory (or self-taught skills). Enrollment limited to 12.

Spr TAPS0960B S01 25584 Th 4:00-6:20(16) (A. Hertz)

#### 0960C The History of Musical Theatre
A study of the history of American Musical Theatre from Tin Pan Alley to today’s Broadway musicals. Students enrolled will study primary-source libretti, musical scores and interviews, as well as historical articles and essays on musical theatre and society. Special emphasis will be placed on musicals and their implication in helping to shape and define American social history, including topics such as national identity, race relations, and the treatment of minorities. Enrollment limited to 35.

Spr TAPS0960C S01 25585 T 4:00-6:20(16) (A. Hertz)

#### 0971 Digital Art (MCM0750)
Interested students must register for MCM 0750 S01 (CRN 13759).

#### 0980 Black Lavender: Black Gay/Lesbian Plays/Dramatic Constructions in the American Theatre (AFRI 0990)
Interested students must register for AFRI 0990 S01 (CRN 21769).

(For Undergraduates and Graduates)

#### 1000 Intermediate Dance
Designed to expand the student’s knowledge of and proficiency in dance as an art form. Mainly a studio course, but selected readings, papers, critiques, and field trips are important components of the course. Prerequisite: TAPS 0310 or equivalent. Enrollment limited to 40. S/NC.

Spr TAPS1000 S01 25586 MTWTh 1:00-2:20(10) (J. Strandberg)

#### 1100 Stage Management
An overview of the process of theatrical performance from script selection to closing, with emphasis on production and stage management. In addition, the role of front-of-house operations and the various theatrical unions are studied as components of different types of theatre organizations, such as regional theatres, opera companies, Broadway shows, and university theatres. Prerequisite: TAPS 0250. Enrollment limited to 12.

Fall TAPS1100 S01 15756 M 4:00-6:20(13)
Spr TAPS1100 S01 26755 M 4:00-6:20(13)

#### 1160 Style and Performance
For qualified sophomores, juniors, and seniors who offer TAPS 0230 as a prerequisite. Period scene study and monologues are basis for comment on individual progress in acting/directing. Extensive reading of dramatic texts and historic research materials. Work in voice, movement, dialect, and poetic text. Substantial commitment necessary for preparation of class scenes. Attendance mandatory. Prerequisite: TAPS 0230. Limited to 20. Instructor’s permission required. No permissions will be given during pre-registration; interested students should sign up on the TAPS 1160 waitlist (form is at http://www.brown.edu/Departments/Theatre_Speech_Dance/) and attend the first day of class.

Spr TAPS1160 S01 25587 MW 12:00-1:50 & TTh 1:00-2:20(10) (L. Marshall)

#### 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.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Enrollment limited to 20.

That are rooted in Mande dance and American dance. Includes study of selected music traditions, oral literatures, and aesthetic traditions. Films, readings, guest lectures and collaborative research projects will help to facilitate a deeper understanding of contemporary Mande society and its artistic production. Students MUST register for a conference and a lecture section. Enrollment limited to 150. Students must attend the first class meeting, as final enrollment is determined by application/tryout during that meeting. If the course is full before the class meeting, interested students can still attend the first class. Students MUST register for a conference, and a lecture section.

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

Topics in Theatre Studies

Acting for Camera
Introduces students to theories of acting for camera to develop the practical skills required for film and television performance. Attention will be paid to the ways in which stage techniques can be adapted for use in media performance. Students will prepare scenes and monologue material written specifically for film and television. Prerequisite: TAPS 0230.

The Creative Ensemble
Develops skills in acting, improvisation, directing, teaching, and writing. Through research, performance and collaboration, participants explore individual/group talents and creative passions. Ensemble-created final performance project. Prerequisite: TAPS 0230 or equivalent. Enrollment limited to 20.

Introduction to Set Design
A survey of the history and concepts of scenic design with emphasis on the art, artists and the social/political movements influencing the major period. Aims to give the designer a foundation in research approaches. Also to provide an examination of stylistic approaches and innovations in the context of the historical period. Enrollment limited to 20.

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. Instructor's permission required.

Performance Theory: Ritual, Play and Drama in Context
What is ritual? What is play? What is mimesis? What is an act? This course offers an introduction to basic texts in Performance Studies applied to the study of ancient and medieval theatre in global perspective. Students will learn fundamentals of performance theory while studying the histories of ancient Greek and Roman theatre, Medieval European ritual, Indian Sanskrit drama and theatrical form, Yoruban traditional performance, and modes of cross-cultural comparison. WRIT

Performance Historiography and Theatre History
This course will provide an introduction to performance history and historiography by concentrating on analysis of dramatic texts, theatrical events, festival performances and "performative" state and religious ceremonies from 1500-1850. We will explore incidents in Asia, the Americas and Europe as related to state consolidation, colonization, incipient nationalism(s), urbanization, cultural negotiation, and the representational practices the enacted. Enrollment limited to 35. WRIT

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Introduction to Set Design
A survey of the history and concepts of scenic design with emphasis on the art, artists and the social/political movements influencing the major period. Aims to give the designer a foundation in research approaches. Also to provide an examination of stylistic approaches and innovations in the context of the historical period. Enrollment limited to 20.
making full-length dances for small and large groups and demands a sophisticated use of space, dynamics, and music. Further emphasis on viewing and interpreting classic and contemporary works from a choreographic viewpoint. S/NC. Enrollment limited to 20.

Spr TAPS1320 S01 26756 MWF 10:00-11:50(03) (J. Strandberg)

1330 Dance History: The 20th Century
An exploration of the major figures and trends in modern dance. While the main focus of the course is on American Dance, attention is given to earlier European and other dance traditions that have contributed to the American dance heritage. May be of particular interest to Americanists, art historians, dancers, and theatre majors.

Fall TAPS1330 S01 17010 TTh 10:30-11:50(09) (J. Strandberg)

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 25602 MW 3:00-4:20 & TTh 2:30-3:50(11)

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 15768 MW 6:30-10:00 PM & Th 8:00-10:00 PM(18) (J. Strandberg)

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 25603 MW 6:30-10:00 PM & Th 8:00-10:00 PM(18) (J. Strandberg)

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. Arts "impossible" brokering of the real and the representational in a dialectic of space is considered from a multiplicity of perspectives in diverse works. Enrollment limited to 20. Instructor permission required. WRIT

Spr TAPS1380 S01 26757 M 3:00-5:20(13) (S. Golub)

1400 Advanced Performance
An investigation into abstract and nonlinear modes of performance, working from fragmentary and recombined narrative, dramatic, and found sources. Seeks to evolve a conceptual approach to performance of the individual actor-director-writer through supervised and independent exercises and projects. Prerequisite: TAPS 0230. For juniors and especially seniors. Enrollment limited to 20. WRIT

Fall TAPS1400 S01 17011 MW 1:00-2:50 & TTh 1:00-2:20(10) (S. Golub)

1500 Advanced Playwriting

1500G Special Topics in Playwriting: Gravity and Grace – Seven Ways of Writing
A playwriting course centered on readings, in-session exercises and a series of assignments relating to navigations of the inexplicable: how do we say what we can't say? How do we say it elegantly, freely, insistently? We'll be writing seven distinct plays en route to a final play;

Theatre Arts and Performance Studies / 191 each of the shorter addresses a different principle in the works of Simone Weil (metaxu, decration, evil), Martin Heidegger (va Giorgio Agamben – Dasein, Eleusis, Ereignis), and Ikkly (zen). Weekly sessions include discussion of assigned reading, reading take-home exercises, and guided in-session writing. The final project is an original full-length play. Prerequisite: TAPS 0100 or 0200. Enrollment limited to 17. Instructor permission required.

Fall TAPS1500G S01 17162 'To Be Arranged' (E. Ehn)

1630 Performativity and the Body: Staging Gender, Staging Race
Bodies come in many shapes, colors, and sizes. In performances practices, the body is an instrument sometimes used to "talk back" to the ways shapes, colors, and sizes are haunted by histories of racialization, sexual discrimination, and other biases. This class explores various feminist and race critical theories in tandem with work of performance artists, visual artists, and theatre artists. Enrollment limited to 20. WRIT

Spr TAPS1630 S01 26758 Th 4:00-6:20(16) (E. Lim)

1670 Latino/a Theatre and Performance
This course will be an introduction to Latino/a theatre concentrating on the following themes: borders, diaspora and exile, political and personal identities, sexuality, gender and violence, and latino re-imagination of U.S. and Latin history. We will read Chicano/a, Cuban American and Nuyorican drama and performance art. No prerequisites.

Spr TAPS1670 S01 26759 Th 9:00-10:20(08) (P. Ybarra)

1690 Performance, Art, and Everyday Life
Provides an introduction to performance-based art. Some knowledge of the historical avant-garde is required. The class will explore site-specific work, time-based work, life art, body art, instruction art and a variety of intermedial artwork. Theories of "theatricality" and "performativity" will be explored as will expressive properties of repetition, excess, mimesis, banality, mobility, framing, failure and shock. Enrollment limited to 16.

Spr TAPS1690 S01 25822 TTh 10:00-11:50(09) (R. Schneider)

1700C Advanced RPM Playwriting (AFRI 1050A)
Interested students must register for AFRI 1050A S01 (CRN 12824 for fall 2011; CRN 21771 for spring 2012).

1700D Intermediate RPM Playwriting (AFRI 1050D)
Interested students must register for AFRI 1050D S01 (CRN 12826 for fall 2011; CRN 21772 for spring 2012).

1700I RPM Playwriting (AFRI 1050E)
Interested students must register for AFRI 1050E S01 (CRN 12829 for fall 2011; CRN 21773 for spring 2012).

1710A Open Source Culture (MCM 1700N)
Interested students must register for MCM 1700N S01 (CRN 25767).

1710B Radical Media (MCM 1700P)
Interested students must register for MCM 1700P S01 (CRN 16843).

1990 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.

Fall; Spr
2100 Seminar in Dramatic and Theatrical Theory
Theory of drama from Greeks to Grotowski. Raises questions that are crucial to thinking about directing and acting in the theatre-the nature of theatrical space, political and aesthetic implications of mimesis and narrative form, and the role of theatre in society. Enrollment limited to 20.

Spr TAPS2100 S01 26829 W 3:00-5:20(14) (E. Lim)

2200 Graduate Seminar in Theatre History
Enrollment limited to 20.

2200I Wittgenstein, Writing and Performance
Performance is the ideal forum in which to discuss Wittgenstein’s philosophy, especially as the latter involves rigorous close reading of the physical and metaphysical identities of words, thought and action in the construction of discernible and livable roles and courses of action and understanding within the given circumstances of the mysterious world into which we are born. Wittgenstein’s aphoristic writing, which creates a poetic structure, along with the necessary incompleteness of Wittgenstein’s thought expression and the wide range of philosophical interpretations of his work by numerous artists and theorists underscore the liveliness of Wittgenstein’s writing as creative texts in themselves. Enrollment limited to 17 juniors, seniors, and graduate students. Instructor permission required.

Fall TAPS2200I S01 17036 M 3:00-5:20(13) (S. Golub)

2310 Graduate Playwriting I
With Word as the bodying forth into social reality of original experience, the structures, purposes and ethical risks of writing for performance are examined; experienced through the reading of the other's works-in-progress, through the reading of essays and in session exercises. Graduate Workshop in Playwriting ordinarily limited to Graduate students; however, on occasion, undergraduates will be admitted with permission of the instructor. Writing samples must be submitted electronically by the first day of class to Erik_Ehn@Brown.edu. Please use “Grad PW” in the subject line. Permission will be given once manuscripts have been reviewed. S/NC. Enrollment limited to 8.

Fall TAPS2310 S01 15773 Th 1:00-5:50(13) (E. Ehn)
Spr TAPS2310 S01 25608 Th 1:00-5:50(16) (E. Ehn)

2500 Acting, Brown/Trinity Rep Consortium
This course is open only to students of the Consortium. It will include fundamental exercises, textual analysis, rehearsal technique, character and scene work designed to provide the student actor with a working method based upon the general principles of the Stanislavski system. A major part of this course will include rehearsal and performance responsibilities.

Fall TAPS2500 S01 15775 ‘To Be Arranged’ (S. Berenson)
Spr TAPS2500 S01 25609 ‘To Be Arranged’ (S. Berenson)

2510 Voice: Power and Range for the Actor
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 15776 ‘To Be Arranged’ (S. Berenson)

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 understand an expression of space, strength of movement, and physical life onstage.

Fall TAPS2520 S01 15777 ‘To Be Arranged’ (S. Berenson)

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 15778 ‘To Be Arranged’ (S. Berenson)

2550 Acting: Realism and Modernism
This is a two-credit course and is open only to students of the MFA Consortium program. This is a scene study class with an emphasis on 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 25610 ‘To Be Arranged’ (S. Berenson)

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 25611 ‘To Be Arranged’ (S. Berenson)

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 25612 ‘To Be Arranged’ (S. Berenson)

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 25613 ‘To Be Arranged’ (S. Berenson)

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 15779 ‘To Be Arranged’ (S. Berenson)

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 15780 ‘To Be Arranged’ (S. Berenson)

2620 Movement: The Alexander Technique
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 15781 ‘To Be Arranged’ (S. Berenson)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
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 15782 "To Be Arranged" (S. Berenson)

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 25614 "To Be Arranged" (S. Berenson)

2660 Voice: Singing with Joy
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 25615 "To Be Arranged" (S. Berenson)

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 25616 "To Be Arranged" (S. Berenson)

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 assistant direct a professional production at Trinity Rep Company.

Spr TAPS2680 S01 25617 "To Be Arranged" (S. Berenson)

2700 Acting: Monologue Performance
This is a two-credit course and is open only to students of the Brown University/Trinity Rep MFA Consortium program. Acting assignments will include solo work presented in a variety of ways. These might include a selection of monologues and songs presented by the students to show the full range of his or her abilities. A performance might also include a solo piece written by the student and presented as a single-actor production.

Fall TAPS2700 S01 15783 "To Be Arranged" (S. Berenson)
Spr TAPS2700 S01 25618 "To Be Arranged" (S. Berenson)

2710 Voice: Dialects and Accents
This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. This course will teach actors various American regional dialects and international accents including British, Irish, Italian and Russian. Students will examine the language with the use of the International Phonetic Alphabet, and will be expected to perform using the regionalisms and dialect and then teach it to the rest of the class.

Fall TAPS2710 S01 15784 "To Be Arranged" (S. Berenson)

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 15785 "To Be Arranged" (S. Berenson)

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 15786 "To Be Arranged" (S. Berenson)

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 25619 "To Be Arranged" (S. Berenson)

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 25620 "To Be Arranged" (S. Berenson)

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 25621 "To Be Arranged" (S. Berenson)

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 TAPS2970 S01 15787 "To Be Arranged"
Spr TAPS2970 S01 25622 "To Be Arranged"

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

Fall; Spr

2891 Master's Thesis Research
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall; Spr

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

Fall TAPS2990 S01 15788 "To Be Arranged"
University Courses

(Primarily for Undergraduates)

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. Instructor permission required. Enrollment Limited to 22. Not Open to: First Year Students.

Fall UNIV0400 S01 14595 T 3:00-5:20(13) (T. Flanigan)

0500 A Comparative Phenomenology of Mystical Experience
Mystical experience – personal engagement with an ultimate reality– is found in virtually all cultures, in explicitly religious and deliberately secular guises. It has received extraordinarily diverse appraisals: some have acclaimed it "the only truth there is," while others have been executed for asserting it. This course examines the nature of mystical experience and the variety of its manifestations in and out of the world's major religious traditions. Students will read broadly in primary sources and engage two contemporary theoretical questions: Is mystical experience conditioned by exclusively socio-cultural factors? Is it possible to derive an ethic from mystical experience? Enrollment limited to 16.

Sum UNIV0500 S01 60441 TTh 1:30-3:50

0540 Introduction to Contemplative Studies
Introduction to the new field of Contemplative Studies focusing on identifying methods human beings have found, across cultures and across time, to concentrate, broaden and deepen conscious awareness. We will study what these methods and experiences entail, how to critically appraise them, how to experience them ourselves, and how they influence the development of empathy, health, and well-being. Preference will be given to students who have taken RELS 0040. "Great Contemplative Traditions of Asia." Students MUST register for a lab, and a lecture section. Instructor's permission required. Enrollment limited to 20.

Sum UNIV0540 S01 60432 TTh 9:00-1:00 (H. Roth)
Spr UNIV0540 S01 24388 W 3:00-5:20(14) (H. Roth)

0980 The Israeli-Palestinian Conflict: Contested Narratives
Like many political conflicts, the struggle between Israelis and Palestinians for the same land has produced contested historical narratives. We will compare the often radically different narratives that Palestinians and Israelis tell themselves and the world about their struggle over Palestine/Israel. Sources will include historical documents, memoirs, and accounts of the conflict by Israeli and Palestinian historians. We will also read works of fiction and view films that present the story of the conflict from both perspectives. Attention will also be paid to efforts by Israelis and Palestinians to transcend their conflicting narratives and arrive at mutual understanding. All sources will be in English translation. LILE

Spr UNIV0980 S01 26779 MW 10:00-10:50(03) (D. Jacobson)

(For Undergraduates and Graduates)

1000 Cognitive Neuroscience of Meditation
The course will focus on the history and development of neuroscientific studies of meditation. We will examine the various technological innovations that drove this research, EEG, PET/ fMRI, and MEG and the central scientific and philosophical challenges presented by it, including: the epistemological status of correlating subjective measures with brain function; the challenges of carrying out and analyzing data from a longitudinal meditation training study; the nature of neuroplasticity; how the brain's default network is affected by meditation; the neural oscillatory correlates of attentional processes in meditation; how the James-Lang hypothesis is affected by these cognitive neuroscientific studies.

Fall UNIV1000 S01 17170 TTh 10:30-11:50(09) (O. Almeida)

1520 The Shaping of World Views
To many students, an exclusive emphasis on specialized studies fragments the "world" in which they live. A widespread feeling of loss pervades the minds of students who often come to universities to learn right from wrong, to distinguish what is true from what is false, but who realize at the end of four years that they have deconstructed their freshman beliefs, values, and ideologies, but have created nothing to replace them. This course examines the diversity of worldviews both synchronically and diachronically and surveys various explanations for such diversity. Conducted in English. Enrollment limited to 30.

Spr UNIV1520 S01 21236 MW 2:00-2:50(07) (O. Almeida)

Urban Studies

(Primarily for Undergraduates)

0210 The City: An Introduction to Urban Studies
What is special about urban life? How and why do cities differ? How has the way we think about the city changed over time? Can we solve urban problems? This course offers an interdisciplinary approach to the history, physical design, spatial form, economy, government, cultures, and social life of cities in the U.S. and beyond.

Fall URBN0210 S01 10883 TTh 10:30-11:50(09)

(For Undergraduates and Graduates)

1000 Fieldwork in the Urban Community
A fieldwork course with limited enrollment. Each student undertakes a fieldwork project in close collaboration with a government agency, a nonprofit association, or a planning firm. In weekly seminar meetings, the class examines a series of urban issues and discusses fieldwork methodology. Students also schedule regular appointments with the instructor. Restricted to Urban Studies concentrators. Enrollment limited to 8 during registration. Instructor will select additional 2 students after first day of class. Instructor permission required. WRIT

Spr URBN1000 S01 20668 TTh 6:30-7:50(12)

1010 Fieldwork in Urban Archaeology and Historical Preservation
Study of the surface and subsurface features of the urban built environment. An introduction to research methods and fieldwork procedures used by archaeologists and historical preservationists who work on urban sites. Students undertake fieldwork projects that involve archival research, close examination of historic structures, and theoretical analysis of the changing urban landscape. Priority given to Urban Studies concentrators and American Civilization grad students. Other students selected on first day of class. Enrollment limited to 20. WRIT

Fall URBN1010 S01 13679 M 7:00-9:20 PM(18)
1420 Urbanization in China
Examines urbanization processes and urban public policy in China. Also draws on historical and recent experience in the U.S. Policy areas including policies affecting urbanization, migration, and industrial location; policies affecting housing, land use, and urban reform; and policies affecting fiscal decentralization and infrastructure investments such as transportation. Prerequisite: ECON 0110. Enrollment limited to 10. Open to juniors and seniors. DVPS
Spr URBN1420 S01 20671 TTh 2:30-3:50(11) (J. Henderson)

1870 Seminars in Urban Studies
Enrollment limited to 20.

1870D Downtown Development
Study of the revitalization of central business districts (CBDs) in large United States cities. Topics include the CBD as a land use system, retail change, the rise of white-collar offices, gentrification near the CBD, and the political economy of CBD redevelopment. Providence's CBD used as a case example; guest speakers discuss its change; field trips are taken. Enrollment limited to 15 during registration. Instructor will select additional 5 students after first day of class. Fall URBN1870D S01 14949 Th 4:00-6:20(13)

1870E Green Cities: Parks and Designed Landscapes in Urban America
Examines the cultural meaning and public use of greenspace in American towns and cities. Covers city parks and metropolitan park systems; the landscaping of riverfronts, streets, cemeteries, and company property; and the contributions of landscape architects such as Olmsted and Manning. Begins in the 17th century with the creation of Boston Common and ends by reviewing the latest greenway plans for Providence. Priority given to Urban Studies concentrators and American Civilization grad students. Other students selected on first day of class. WRIT Spr URBN1870E S01 24804 T 4:00-6:20(16)

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. Fall URBN1870M S01 16791 W 3:00-5:20(14) (M. Orr)

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. Fall; Spr

Fall XLIST Courses of interest to Concentrators in Urban Studies
The following courses offered by other departments will fulfill specific 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.

Archaeology and the Ancient World
ARCH 1600 Archaeologies of the Near East

Economics
EDUC 1150 Education, the Economy, and School Reform
EDUC 1650 Policy Implementation in Education

English
ENGL 1710I Harlem Renaissance
ENGL 1760K Reading New York

Environmental Studies
ENVS 1400 Sustainable Design in the Built Environment
ENVS 1700A Cultural Competence and Ethics

Geology
GEOL 1320 Introduction to GIS

History
HIST 1670 History of Brazil
HIST 1820 American Urban History to 1870

Political Science
POLS 1310 African American Politics
POLS 1760 The Obama Infrastructure Policy

Public Policy and American Institutions
PPAI 1700R Urban Revitalization: Lessons from the Providence Plan

Sociology
SOC 1100 Introductory Statistics for Social Research
SOC 1871F Introduction to GIS

Spring XLIST Courses of interest to Concentrators in Urban Studies
The following courses offered by other departments will fulfill specific 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.

Archaeology and the Ancient World
ARCH 1600 Archaeologies of the Near East

Economics
EDUC 1150 Education, the Economy, and School Reform
EDUC 1650 Policy Implementation in Education

English
ENGL 1710I Harlem Renaissance
ENGL 1760K Reading New York

Environmental Studies
ENVS 1400 Sustainable Design in the Built Environment
ENVS 1700A Cultural Competence and Ethics

Geology
GEOL 1320 Introduction to GIS

History
HIST 1670 History of Brazil
HIST 1820 American Urban History to 1870

Political Science
POLS 1310 African American Politics
POLS 1760 The Obama Infrastructure Policy

Public Policy and American Institutions
PPAI 1700R Urban Revitalization: Lessons from the Providence Plan

Sociology
SOC 1100 Introductory Statistics for Social Research
SOC 1871F Introduction to GIS

Visual Art
(Primarily for Undergraduates)

0061 Drawing I and II: Introduction and Advanced Tutorial
Enrollment Limited to 20.
Sum VISA0061 S01 60350 "To Be Arranged" (E. Ansel)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
196 / Visual Art

0062 Printmaking Workshop
Enrollment Limited to 20.

Sum VISA0062 S01 60351 ‘To Be Arranged’ (L. Bostrom)

0063 Painting I and II: Color and Pattern, Nature and Culture in Pont-Aven
Enrollment Limited to 20.

Sum VISA0063 S01 60349 ‘To Be Arranged’ (W. Edwards)

0064 Sculpture/Installation/Site Work
Enrollment Limited to 20.

Sum VISA0064 S01 60352 ‘To Be Arranged’

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. Admittance to this course will be determined by an online lottery, which can be accessed through the VISA 0100 Lottery link in the Student menu in Banner Web. VISA 0100 or 0110 is a prerequisite to any advanced studio course work at Brown or the Rhode Island School of Design. Under certain circumstances a student may petition for a waiver of this requirement upon submission of a portfolio. Instructor’s permission required.

Fall VISA0100 S01 60312 TTh 1:30-5:30 (K. Lamb)
Sum VISA0100 S02 60313 TTh 6:00-10:00 PM (D. Stupar)
Fall VISA0100 S03 26666 TTh 1:00-5:00(13)
Fall VISA0100 S04 16914 TTh 4:00-5:50(13)
Fall VISA0100 S05 16915 TTh 6:00-7:50(13) (L. Tarentino)
Spr VISA0100 S01 20212 MW 9:00-10:50(16)
Spr VISA0100 S02 20213 MW 1:00-2:50(16)
Spr VISA0100 S03 20214 MW 10:00-11:50(16) (P. Myoda)
Spr VISA0100 S04 20215 MW 1:00-2:50(16)
Spr VISA0100 S05 20216 MW 4:00-5:50(16)
Spr VISA0100 S06 20217 TTh 1:00-2:50(16)
Spr VISA0100 S07 16914 TTh 4:00-5:50(16)
Spr VISA0100 S08 16915 TTh 6:00-7:50(13)
Spr VISA0100 S09 20212 MW 9:00-10:50(16)
Spr VISA0100 S10 20213 MW 1:00-2:50(16)
Spr VISA0100 S11 20214 MW 10:00-11:50(16) (P. Myoda)
Spr VISA0100 S12 20215 MW 1:00-2:50(16)
Spr VISA0100 S13 20216 MW 4:00-5:50(16)
Spr VISA0100 S14 20217 TTh 1:00-2:50(16)
Spr VISA0100 S15 26666 TTh 4:00-5:50(16)
Spr VISA0100 S16 26667 TTh 6:00-7:50(16)

0110 Advanced Studio Foundation
Some students arrive at Brown with a greater understanding of visual art principles than most, yet need an introduction to other aspects before taking more advanced courses. Figure drawing is practiced throughout the semester, utilizing a variety of media. Weekly outside assignments explore diverse themes and become the subject of comprehensive class discussions. Serves as a prerequisite to upper-level courses, as does VISA0100.

Admittance to this course will be determined by a portfolio review. Students must submit their portfolio to the Visual Art department office on 8/29/11 in List, room 222; digital images submitted on a CD are preferred. Students will be notified of acceptance into the class on 9/6/11. Instructor’s permission required. Enrollment limited to 18.

Fall VISA0110 S01 10222 MW 10:00-11:50(03) (P. Myoda)

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 VISA0120 S01 10223 ‘To Be Arranged’

Fall VISA0120 S02 17096 ‘To Be Arranged’
Spr VISA0120 S01 20221 MW 10:00-11:50(03) (E. Osborn)

0130 3-D Foundation
This is an extensive study in form and structure intended to develop spatial understanding and the fundamentals of 3-dimensional design and construction. Students will explore the structural, compositional and conceptual implications of basic 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 casting techniques, safe usage of power tools and welding equipment. In addition special emphasis will be placed on creativity, critical thinking and the ability to successfully articulate ideas visually. Instructor permission required. Students who are not admitted during pre-registration or were unable to pre-register are advised to attend the first meeting of the class. Instructor’s permission required. Enrollment Limited to 15. Prerequisites: VISA 0100 or VISA 0110.

Spr VISA0130 S01 23407 MW 10:00-11:50(03)

0710 Introduction to Filmmaking: Time and Form (MCM 0710)
Interested students must register for MCM 0710 S01 (CRN 21033).

0730 Introduction to Video Production: Critical Strategies and Histories (MCM 0730)
Interested students must register for MCM 0730 S01 (CRN 21041).

0750 Digital Art (MCM 0750)
Interested students must register for MCM 0750 S01 (CRN 13759).

0800H TV/Not TV: Theory and Production (MCM 0800H)
Interested students must register for MCM 0800H S01 (CRN 16844).

(For Undergraduates and Graduates)

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 or 0110.

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.

Students who are unable to pre-register should attend the first class.

Fall VISA1110 S01 10224 TTh 1:00-4:50(10)
Spr VISA1110 S01 26852 TTh 9:00-11:50(08) (L. Bostrom)

1120 Drawing II
Drawing from the imagination, the model, and landscapes in a variety of media. Great emphasis is placed on creative work and on classroom participation. Prerequisite: VISA 0100 or 0110. This course restricted to 20 students. 18 seats will be available during pre-registration. This class will satisfy VA concentration requirement for drawing. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

Spr VISA1120 S01 20218 TTh 1:00-4:50(10)

1210 Printmaking
Lithography, Etching, Silkscreen or Relief printmaking will be taught, depending on the semester. Enrollment limited to 17.

1210G Silkscreen
This course will provide students with a thorough knowledge of both water-based screen printing techniques and digital imaging. The intersection of digital printing processes and screen printing within the context of contemporary works on paper will be explored through a series of experimental mixed-media projects. Work will be in both black
and white and color. Prerequisite: VISA 0100 or VISA 0110. This course restricted to 17 students. Students who are not admitted during pre-registration or were unable to pre-register should attend the first class.

Spr  VISA1210G  S01  26853  TTh 9:00-11:50(08)  (L. Bostrom)

1240 Art of the Book
Will examine the book, structurally and conceptually, as traditional craft, and artist's medium. Students will learn the materials, tools and techniques of bookbinding, as they explore the expressive possibilities of the book form. Topics and projects will include non-adhesive bookbinding, hardcover cloth and leather bound books, clamshell boxes, book repair and papermaking. Studio work will be augmented with field trips, artist visits, and guided exploration of the special collections at the John Hay Library. While students may take VISA 1240 only, they may not enroll in 1250 without 1240 as a prerequisite. Pre-requisite: VISA 0100 or 0110. This course restricted to 15 VISA Concentrators, and others by permission of the instructor. 10 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

Fall  VISA1240  S01  10225  MW 1:00-4:50(06)  (E. Roustom)

1250 Art of the Book
Will examine the artist's book from the printer/publisher perspective. Students will learn the basics of book design, traditional typography and the letterpress printing, as they consider the book and its related printed matter in the service of content. The course will be run as a fine press publishing house in which 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. Pre-requisite: VISA 0100 or 0110, and VISA 1240. This course restricted to 15 students. 5 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

Spr  VISA1250  S01  20219  MW 1:00-4:50(06)  (E. Roustom)

1310 Painting I
Designed to accommodate a variety of interests and aptitudes. Provides basic instruction in media and painting procedure, but emphasizes the development of the image as a visual statement. Covers the building of stretches; basic color principles, and painting media and procedures. Slides and related books and articles are discussed. Individual criticism is given; participation in regularly scheduled group discussions is required. Pre-requisite: VISA 0100 or 0110. This course restricted to 18 VISA Concentrators, and others by permission of the instructor. 10 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register should attend the first class.

Fall  VISA1310  S01  10226  MW 1:00-4:50(06)  (W. Edwards)
Spr  VISA1310  S01  20220  TTh 1:00-4:50(10)

1320 Painting II
The advanced class covers information beyond the introductory level. Individual criticism is emphasized. Students are required to complete all structured assignments and to participate in regularly scheduled discussions. Prerequisite: VISA 0100 or VISA 0110, and VISA 1310. Instructor Permission required. This course will be restricted to 18 VISA Concentrators and others by permission of the instructor. 10 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register are advised to attend the first meeting of the class.

Fall  VISA1320  S01  17098  TTh 1:00-4:50(10)  (L. Bostrom)
Spr  VISA1320  S01  26854  MW 1:00-4:50(06)  (W. Edwards)

1330 Drawing with Watercolor
This course will be a rigorous examination of the possibilities of drawing with watercolor. We will do a lot of work outside and there will be an emphasis on unorthodox use of the watercolor medium. Because the basis of watercolor is sound drawing, there will be considerable instruction and practice in drawing fundamentals such as perspective, value, composition, scale, rendering, etc. Recommended prerequisite: VISA 0100, 0110, or comparable foundation level course is expected.

Sum  VISA1330  S01  60315  MW 9:00-1:00

1410 Sculpture: Material Investigations
This studio course addresses basic sculptural methods, i.e., additive and subtractive modeling, casting, and assemblage, and common sculptural materials, i.e., wood, metal, plaster, and found objects. Demonstrations and 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 are invited to take this course more than once, as the problems can be customized for those with more experience. Pre-requisite: VISA 0100 or 0110 or VISA 0130. 10 seats will be available during pre-registration. 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  10234  MW 1:00-4:50(06)  (P. Myoda)

1420 Sculpture: Conceptual Propositions
This studio course explores a number of contemporary sculptural theories and practices. Students develop sculptural solutions to a given set of problems, using materials and methods of their choosing. Contemporary issues raised in critiques and readings. Completion of VISA 1410 or comparable experience in some type of three-dimensional practice is suggested, but not required. Demonstrations and workshops on a number of sculptural tools and materials will be given as needed. Students are invited to take this course more than once, as the problems can be customized for those with more experience. Extensive outside work expected. Pre-requisite: VISA 0100 or VISA 0110 or VISA 0130. 10 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting of the class.

Spr  VISA1420  S01  20222  MW 1:00-4:50(06)  (P. Myoda)

1510 Photography I
Introductory course in black and white photography, emphasizing core photographic concepts, possibilities, history, genres, technical information, and techniques. A variety of lens-less and lens based exercises will be introduced blurring the boundaries between the "traditional" sense of photography (as means of mechanical reproduction) and other studio based media such as drawing or painting. Large and medium format cameras will be introduced, but students should have their own 35 mm film camera. Pre-requisite: VISA 0100 or 0110. This course restricted to 15 VISA Concentrators, and others by permission of the instructor. 10 seats will be available during pre-registration. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

Fall  VISA1510  S01  10236  TTh 1:00-4:30(10)
Spr  VISA1510  S01  23292  TTh 1:00-4:30(10)

1520 Photography II - Digital Photography
Will explore digital image processing in color and B&W. Using digital cameras, computer editing software, digital printing, as well as critical analysis of computer digitized images will be covered. The execution of visual problems and in-class presentations as well as theoretical readings allow students to examine the content and function of digital imaging technology and production in modern photography. A digital SLR type camera is required. Pre-requisite: VISA 0100, VISA 0110, or VISA 0120. Prerequisite: VISA 0100, VISA 0110, or VISA 0120. This course restricted to 15 VISA Concentrators, and others by permission of the instructor. 10 seats will be available during pre-registration.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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Students who are not admitted during pre-registration should attend the first meeting. May be repeated once for credit.

Fall VISA1520 S01 10238 TTh 9:00-11:30(08)
Spr VISA1520 S01 23293 TTh 9:00-11:30(08)

1700D Reframing Documentary Production: Concepts and Questions (MCM 1700D)
Interested students must register for MCM 1700D S01 (CRN 11462).

1700N Open Source Culture (MCM 1700N)
Interested students must register for MCM 1700N S01 (CRN 25767).

1700P Radical Media (MCM 1700P)
Interested students must register for MCM 1700P S01 (CRN 16843).

1700R The Art of Curating (MCM 1700R)
Interested students must register for MCM 1700R S01 (CRN 24029).

1700S Narrative and Immersion (MCM 1700S)
Interested students must register for MCM 1700S S01 (CRN 24743).

1800 Seminars in Production
Topics change from year to year and instructor to instructor. In each session enrollment is limited to 20. Written permission will be given after the first meeting. Topics might include: Public Art, Problems of Documentary, Approaches to Digital Cinema, the Radiophonic and Radio, Accessorizing, Painting, Installation of Mixed Media, etc.

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. Enrollment limited to 20.

Fall VISA1800C S01 10242 TTh 10:00-11:50(09) (L. Bostrom)

1800L Hybrid Art
Creativity is typically characterized as the ability to produce work that is both novel and appropriate to a given context. Through interdisciplinary studio practice, we will research, develop, and refine approaches to the creative process. Our investigation will examine ideation and iteration, studio practice, we will research, develop, and refine approaches to the creative process. Our investigation will examine ideation and iteration, exploratory play, and creative collaboration as strategies for innovation. An emphasis will be placed on the complementary relationship between divergent thinking (the exploration of diverse possibilities) and convergent thinking (bringing it all together as a cohesive whole) by translating abstract concepts into concrete outcomes. Our ultimate goal this semester will be to cultivate an open source community of creative collaborators in order to generate work that crosses boundaries and explores new territories. Instructor’s permission required. Enrollment limited to 16.

Fall VISA1800L S01 13739 MW 1:00-4:50(06) (R. Fishman)
Spr VISA1800L S01 23600 MW 1:00-4:50(06) (R. Fishman)

1800P Art/Work: Professional Practice for Visual Artists
Unlike other creative professionals, visual artists don’t have agents or managers—you have to do it all yourself. This class will cover business basics including tracking inventory and preparing invoices; taking legal precautions like registering a copyright and drafting consignment forms; using promotional tools; and making career decisions such as choosing the right venue to show your work. Grants, residencies, do-it-yourself strategies and relationships with galleries and nonprofit institutions will be discussed in depth. Discussion and assignments will emphasize community and the practical, hands-on skills necessary to thrive as a visual artist. Prerequisite: VISA 0100 or 0110, in addition to two semesters of VISA studio courses. Enrollment limited to 20 juniors and seniors in Visual Art, WRIT

Spr VISA1800P S01 26271 F 1:00-4:50(06) (H. Bhandari)

1910 Individual Study Project in the Practice of Art
Work on an approved project leading to the presentation of a portfolio, under supervision of an individual member of the staff. Project proposals must be filed with the department no later than the first week of the semester. Section numbers vary by instructor. Instructor’s permission required.
Fall; Spr

1990 Honors
Section numbers vary by instructor. Instructor’s permission required.
Spr

Undergraduate Concentrations

Africana Studies

The Department of Africana Studies is the intellectual center for faculty and students interested in the artistic, historical, literary, and theoretical expressions of the various peoples and cultures of Africa and the African Diaspora. Located in the historic Churchill House, the Department is dedicated to the critical exploration and development of new knowledges about the cultures, histories, social formations and artistic expressions of Africa and various locations that comprise the African 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 (Fall ONLY)
- 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.

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.

Honors

Africana Studies’ concentrators with outstanding records may be admitted to the department’s Honors Program. Prior to the end of the concentrator’s junior year and while working in consultation with a faculty advisor, the student must prepare a work plan. This plan, not to exceed three (3) typewritten pages, must be approved and signed by the faculty advisor who is to direct the Honor’s thesis. At the onset of the senior year, the Honor’s candidate is expected to have become familiar with the secondary works in the field. Secondary readings should be extensive and be incorporated into the work plan. The Honor’s candidate is also expected to complete a research paper of distinguished quality while enrolled in a 1000-level seminar. Participation in the Africana Studies senior-level capstone seminar AFRI 1360 is required.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcssearch_public_P_Main).
For students completing graduation requirements by the end of Semester I (Fall), projects must be submitted by December 1st. For students completing graduation requirements by Semester II (Spring), the project should be submitted by April 20th. By the end of the fourth (4th) week of the concentrator's seventh (7th) semester, a written proposal approved by the advisor and a secondary reader must be submitted to the concentration advisor. A progress report, prepared and signed by the student and countersigned by the faculty advisor must be presented to the concentration advisor.

American Civilization (not available to Class of 2013 and beyond)

Students who concentrate in American civilization pursue an interdisciplinary approach to the study of the social, cultural and political experiences and identities of the diverse groups who constitute and have constituted the society of the United States. In consultation with the concentration advisor, American civilization concentrators design individualized concentration plans and have the opportunity to take courses both in the department and throughout the University for concentration credit.

Students must take ten upper-level courses to fulfill the requirements for a concentration in American civilization. The rules governing the choice of these courses are as follows:

- Completion of four (three, if opting for four focus courses) of the numerous 1000-level survey courses offered by the Department's faculty. These courses examine a wide variety of topics and themes and are designed to provide concentrators with a broad foundation in the interdisciplinary study of U.S. society and culture.
- Completion of three (four, if opting for three AMCV 1000-level courses) which together define a coherent area of specialization within the concentration by focusing on a particular problem, topic, or area of American society and culture. These courses, which may be taken in any department in the university, should be upper-level and pertain to U.S. society and culture. Other students have prepared successful focus areas in a wide range of fields, i.e. American popular culture, 1960-2004; education, race and class; health care policies; the sixties; women's history, 1850 to the present; nineteenth century material culture; religious practice during the twentieth century.
- Completion of a proseminar/writing seminar preferably before the senior year. This requirement may be fulfilled in two ways: either by taking an AMCV 0190 or AMCV 0150 seminar prior to the junior year; or by taking an upper-level seminar in American Civilization in another department, in which reading and writing assignments focus on some aspect of U.S. society and culture.
- Completion of the Junior Seminar, AMCV 1700. This course is designed to introduce new concentrators to some of the more important categories of analysis, methodologies, approaches and concerns of American Civilization.
- Completion of an AMCV 1900-1909 seminar taken in the senior year. The aim of this final senior seminar is to apply the interdisciplinary skills learned in the field of American Civilization to a semester-long, in-depth study of a particular topic.

Honors

The Honors program in the Department of American Civilization is designed for students who want to write a senior paper in order to explore a topic in depth; engage in original research; work closely with a particular faculty member; and receive their AB with Honors in American Civilization. The Department sees the senior thesis as a capstone experience which allows students to use many of the skills and concepts they’ve learned at Brown in conceiving and carrying out a substantial research project. The Department recommends that prospective thesis writers contract with a faculty member to do a directed reading during the second semester of the junior year in order to define a topic and research question and complete a thesis prospectus. In each semester of the Senior year, students register for a thesis writing course (AMCV 1970) under the supervision of their advisor and prepare a sixty to one hundred page thesis which they submit to the department in April.

Concentrators considering writing an honors thesis should consult with the Concentration Honors Advisor early in the second semester of their junior year. Admission to Honors candidacy requires:

1. An academic record providing evidence of the student's ability to do Honors work
2. Two Faculty Recommendation Forms, attesting to the student's ability to do Honors work. These forms should be given to two faculty members with whom the student has taken a class in which a major paper was required.
3. A completed Honors Application Form which must be signed by both the prospective honors candidate and a Brown Faculty member who has agrees to be his/her Thesis Advisor.

American Studies (available to Class of 2013 and beyond)

The concentration in American Studies offers its students an array of analytical tools, knowledge and experiences to understand American society and cultures as products of historical, cultural and contemporary processes that are local, national and global. American Studies at Brown is predicated on the ideal of a scholarly engagement with the public that enables its graduates to, as Brown’s 1764 University Charter demands, "discharge the offices of life with usefulness and reputation." Drawing deeply from the traditions of the liberal arts, an American Studies concentration introduces students to a range of methods and a variety of evidence, while helping them frame a coherent understanding of the American experience.

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.

Each concentrator will take 10 courses including a Junior Seminar as one of four seminars. Courses are organized by the four themes and four approaches that define America Studies at Brown. Each concentrator will use this framework to create an individual focus 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

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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, 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 at Brown is a broad discipline that addresses human social and cultural diversity in the present and past. It includes the subfields of sociocultural anthropology, archaeology, biological anthropology, and anthropological linguistics. Anthropology at Brown is intended to provide students with an informed appreciation and deeper understanding of different societies and their practices, beliefs, and values.

Concentrators should select their courses in anthropology in consultation with the concentration advisor. At least nine courses in anthropology are required, including:

1. One of the following sociocultural/linguistic anthropology classes:
   - Introduction to Cultural Anthropology ANTH 0100
   - Culture and Human Behavior ANTH 0200
   - Culture and Health ANTH 0300
   - Sounds and Symbols: Introduction to Linguistic Anthropology ANTH 0800

2. One of the following biological anthropology/archaeology classes:
   - Introduction to Human Evolution ANTH 0310
   - Introduction to Archaeology ANTH 0500

3. One of the following, normally taken in junior or sophomore year:
   - History of Anthropology ANTH 1900
   - Ethnography and Ethnographic Methods ANTH 1940
   - Archaeological Field Methods ANTH 1950
   - Material Culture and History ANTH 1621

4. Contemporary Topics in Anthropology ANTH 1910, Senior Seminar, normally taken in the senior year.

5. At least one 1000-level course on a particular world area.

6. At least five of the courses counted toward the concentration must be offered at the 1000-level or above.

**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 ANTH 1970, 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

Applied Mathematics offers several standard concentration programs which are listed in detail in the Course Announcement Bulletin and on the Registrar's web-page. 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.

Prerequisite: MATH 0090, 0100 or their equivalent.

Program: Ten additional semester courses approved by the Division of Applied Mathematics. These classes must include:

- MATH 0160 and 0520
- APMA 0350 and 0360
- one course on programming from the following list: APMA 0090, 0100, CSCI 0040, 0150 or 0170

APMA 0330, 0340 will sometimes be accepted as substitutes for APMA 0350, 0360. Of the unspecified courses four should be chosen from the 1000-level courses taught by the Division of Applied Mathematics. Substitution of alternate courses for the specific requirements is subject to approval of the division. Concentrators are urged to consider MATH 0540 as an alternative to MATH 0520 and to complete their introductory programming course before the end of their sophomore year.

Standard program for the Sc.B. degree.

Eighteen approved semester courses in mathematics, applied mathematics, engineering, the natural or social sciences. These classes must include:

- MATH 0090, 0100, 0180, and 0520
- APMA 0350 and 0360
- A senior seminar: APMA 1930 or 1940, or an approved equivalent
- one course on programming from the following list: APMA 0090, 0100, CSCI 0040, 0150, or 0170

APMA 0330, 0340 will sometimes be accepted as substitutes for APMA 0350, 0360. Of the unspecified courses six should be chosen from the 1000-level or higher level courses. Substitution of alternate courses for the specific requirements is subject to approval by the division. Concentrators are urged to consider MATH 0540 as an alternative to MATH 0520 and to complete their introductory programming course before the end of their sophomore year.

Applied Mathematics–Computer Science

Requirements for the Sc.B. degree.

Prerequisites (2 courses):

- Math
- An approved math course (any MATH course beyond 0090 except for 0420, or APMA 0330).

Writing
- A student must take at least one course that satisfies the CS Department Writing Requirement.

Concentration Requirements (16 or 17 courses):

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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- **Core – Math**
  - MATH 0180 or 0350
  - MATH 0520 or 0540, or CSCI 0530

- **Core – Applied Mathematics**
  - APMA 0350
  - APMA 0360
  - APMA 1170 or 1180

- **Core – Computer Science**
  - (CSCI 0150 and CSCI 0160) or (CSCI 0170 and CSCI 0180) or (CSCI 0190 and a 1000-level CS course)
  - CSCI 0220
  - Two of:
    - CSCI 0310
    - CSCI 0320
    - CSCI 0510

- **Additional Courses**
  - 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.
  - 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 1650/1660.
  - 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.

**Applied Mathematics–Economics**

The philosophy of this program is to provide sufficient command of mathematical concepts to allow pursuit of an economics program emphasizing modern research problems. Economic theory has come to use more and more mathematics in recent decades, and empirical research in economics has turned to sophisticated statistical techniques. The applied mathematics-economics concentration is designed to reflect the mathematical and statistical nature of modern economic theory and empirical research.

This concentration comes in two flavors, or tracks. The first is the advanced economics track, which is intended to prepare students for graduate study in economics. The second is the mathematical finance track, which is intended to prepare students for graduate study in finance, or for careers in finance or financial engineering. Both tracks of the applied mathematics-economics concentration have A.B. degree versions and Sc.B. degree versions.

**Standard program for the A.B. degree (Advanced Economics track):**

Prerequisites: MATH 0100 and MATH 0520.

**Course requirements:**

Applied Mathematics requirements (a):

- APMA 0350
- APMA 0360
- One course from APMA 0160, CSCI 0040, 0150, 0170
- One course from APMA 1200, 1210
- APMA 1650

Applied Mathematics requirements (b):

- One course from APMA 1200, 1210, 1660, 1670, 1680, 1690, 1700, or MATH 1010

No course may be used to simultaneously satisfy (a) and (b).

Economics requirements:

- ECON 1130 (or 1110 with permission)
- ECON 1210
- ECON 1630
- three other 1000-level economics courses. Of those three courses, at least two must be chosen from the "mathematical-economics" group. This group comprises ECON 1170, 1465, 1470, 1640, 1750, 1759, 1810, 1850, 1860, and 1870.

**Standard program for the Sc.B. degree (Advanced Economics track):**

Prerequisites: MATH 0100, 0520.

**Course requirements:**

Applied Mathematics requirements (a):

- APMA 0350
- APMA 0360
- One course from APMA 0160, CSCI 0040, 0150, 0170
- One course from APMA 1200, 1210
- APMA 1650

Applied Mathematics requirements (b):

- Two courses from APMA 1200, 1210, 1660, 1670, 1680, 1690, 1700, MATH 1010

No course may be used to simultaneously satisfy (a) and (b).

Economics requirements:

- ECON 1130 (or 1110 with permission)
- ECON 1210
- ECON 1630
- At least five other 1000-level economics courses. Of those five courses, three must be chosen from the "mathematical-economics" group. This group comprises ECON 1170, 1465, 1470, 1640, 1750, 1759, 1810, 1850, 1860, and 1870.

**Standard program for the A.B. degree (Mathematical Finance track):**

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
Prerequisites: MATH 0100, 0520.

Course requirements:

Applied Mathematics requirements:

- APMA 0350
- APMA 0360
- One course from APMA 0160, CSCI 0040, 0150, 0170
- APMA 1200
- APMA 1650
- One course from APMA 1180, 1330, 1660, 1670, 1680, 1690, 1700, 1720, MATH 1010. (APMA 1720 is most preferred in this list.)

Economics requirements:

- ECON 1130 (or 1110 with permission)
- ECON 1210
- ECON 1630
- Three other 1000-level economics courses. Of the three courses, two must be chosen from the "financial economics" group and one must be chosen from the "mathematical economics" group. The "financial economics" group comprises ECON 1710, 1720, 1750, 1760, 1770, and 1790. The "mathematical economics" group comprises ECON 1170, 1465, 1470, 1640, 1750, 1759, 1810, 1850, 1860, and 1870. No course may be used to simultaneously satisfy the "financial economics" and the "mathematical economics" requirements.

Standard program for the Sc.B. degree (Mathematical Finance track):

Prerequisites: MATH 0100, 0520.

Course requirements:

Applied Mathematics requirements:

- APMA 0350
- APMA 0360
- One course from APMA 0160, CSCI 0040, 0150, 0170
- APMA 1200
- APMA 1650
- Two courses from APMA 1180, 1330, 1660, 1670, 1680, 1690, 1700, 1720, MATH 1010. (APMA 1720 is most preferred in this list.)

Economics requirements:

- ECON 1130 (or 1110 with permission)
- ECON 1210
- ECON 1630
- Five other 1000-level economics courses. Of the five courses, three must be chosen from the "financial economics" group and two must be chosen from the "mathematical economics" group. The "financial economics" group comprises ECON 1710, 1720, 1750, 1760, 1770, and 1790. The "mathematical economics" group comprises ECON 1170, 1465, 1470, 1640, 1750, 1759, 1810, 1850, 1860, and 1870. No course may be used to simultaneously satisfy the "financial economics" and the "mathematical economics" requirements.

Undergraduate Concentrations / 203

Archeology and the Ancient World

The undergraduate concentration in Archaeology and the Ancient World provides students with 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 (roughly equivalent to the ancient Near East). 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. The concentration is also designed to allow students to build progressively upon what they have learned, moving from introductory courses to upper level seminars. Research opportunities, through summer fieldwork, museum experience, or independent study projects, are strongly encouraged.

With this concentration, the three tracks are: Archaeology and the Ancient World; Classical Archaeology; and Egyptian and Ancient Western Asian Archaeology. Archaeology and the Ancient World is the most exploratory of the concentration tracks, and this option emphasizes material culture studies across the full spectrum of the ancient world. Classical Archaeology is intended for those interested chiefly in the ‘classic’ civilizations of the Mediterranean (Greece and Rome), as well as for those interested in both earlier (prehistoric) and later (medieval) periods in that geographic region. Egyptian and Ancient Western Asian Archaeology is intended for those interested chiefly in the cultures of Egypt and Ancient Western Asia (the ancient ‘Near East’— Anatolia, the Levant, Mesopotamia), from prehistoric through Islamic times.

Required Courses:

Each of these tracks shares the following course requirements: the student must take a total of 10 courses, including:

1. One introductory course in archaeological methodology, history and/or theoretical approaches (e.g. ARCH 0050 Archaeological Fieldwork; ARCH 0100 Field Archaeology in the Ancient World; or ANTH 1600 Archaeological Field Work).
2. One introductory course in the methodology, history and/or theoretical approaches of ancient art history (e.g. ARCH 0030 Art in Antiquity: An Introduction; ARCH 0420 Archaeologies of the Greek Past; ARCH 0520 Roman Art and Architecture; HIAA 0010 Introduction to the History of Art and Architecture).
3. Two cognate courses, not listed primarily by the Joukowsky Institute, which EITHER relate to the study of the ancient world OR to the discipline of archaeology. Outside courses are chosen with the approval of the concentration advisor from appropriate 1000-level (or above) offerings in other departments such as, but not limited to: Anthropology, Classics, Early Cultures, Egyptology and Ancient Western Asian Studies, Environmental Studies, Geological Sciences, History, History of Art and Architecture, Religious Studies. One term of language study, in any ancient language, may also be counted toward this requirement.

For Archaeology and the Ancient World, the remaining requirements are:

1. Two courses in Egyptian or Ancient Western Asian archaeology and art.
2. Two courses in Mediterranean (prehistoric, Greek, Roman, medieval) archaeology and art.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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Note: At least two of the courses selected to satisfy requirements #1 and #2 must be at or above the 1000-level.

3. Two additional courses, in EITHER Mediterranean (prehistoric, Greek, Roman, medieval) archaeology OR Egyptian or Ancient Western Asian archaeology and art, at or above the 1000-level.

For Classical Archaeology, the remaining requirements are:

1. One course in Egyptian or Ancient Western Asian archaeology and art.
2. Three courses in Mediterranean (prehistoric, Greek, Roman, medieval) archaeology and art, at least two of which must be at or above the 1000-level.
3. One course in ancient Greek or Roman history (e.g. CLAS 1210, CLAS 1220, CLAS 1310, CLAS 1320).
4. One course in either Ancient Greek or Latin, at a level beyond the first year of study (e.g. GREK 0300, GREK 0400 or LATN 0300, LATN 0400).

For Egyptian and Ancient Western Asian Archaeology, the remaining requirements are:

1. One course in Mediterranean (Bronze Age, Greek or Roman) archaeology and art.
2. Three courses in Egyptian and Near Eastern archaeology and art, at least two of which must be at or above the 1000-level.
3. Two terms of course work in a pertinent ancient language (e.g. Aramaic, Akkadian, Coptic, Classical Hebrew, Middle Egyptian).

Capstone Experience and Study Abroad

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.

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, written under the supervision of a faculty advisor and second reader. (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. Details on deadlines for a thesis prospectus, for thesis drafts and for a final public presentation of the work are available on request to the Director of Undergraduate Studies. The completed thesis will be evaluated by the advisor and second reader, who will discuss its strengths and weaknesses with the student; they will also agree a grade for ARCH 1970 and ARCH 1990.

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 graduate with Honors.

Astronomy

Standard concentration for the A.B. degree

Twelve courses are required.

Prerequisites: PHYS 0070, 0160 (or 0050, 0060), PHYS 0270; MATH 0170 and 0180, or MATH 0190 and 0200, or MATH 0350 (or equivalent); PHYS 0470.

Program: One additional mathematics course: MATH 0520, 0540, PHYS 0720, APMA 0330 or 0340; two of the following astrophysics courses: PHYS 1100, 1250, 1270, 1280; three additional 1000- or 2000-level courses in physics or a related field (suggestions: APMA 1670; ENGR 1860; GEOL 0810, 1710, 1810; MATH 1060; PHYS 0500, 0560, 0800, 1410, 1510, 1530, 1560).

Biochemistry and 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 and molecular biology 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 at Brown. Faculty sponsors are drawn from both the Chemistry Department and the Division of Biology and Medicine, and include basic sciences and clinical faculty.

This program provides excellent preparation for future careers in research (academic, government or private industry), health careers, education, technical law, or business.

Standard program for the Sc.B. degree

Twenty semester courses in biology, chemistry, mathematics, and physics, including the following core requirements:

1. Three courses in physical and organic chemistry (beginning with CHEM 0330; or equivalent credit).
2. Three courses in mathematics, statistics and/or computer science (typically including MATH 0090, 0100, or equivalents).

3. Two courses in physics (typically PHYS 0030, 0040, or equivalents).

4. One course in biophysical chemistry (CHEM 0400).

5. Three courses in biochemistry (BIOL 0280 and 1270, plus CHEM 1230 or 1240).

6. Six electives; four taken from the following: BIOL 0200, 0470, 0500, 0530, 1050, 1090, 1100, 1260, 1290, 1310, 1540, 1560, 2200, 2210; NEUR 1020, 1670; CHEM 0500, 1140, 1220, 1230, 1240, 1450; and two from any quantitative science or mathematics course relevant to biochemistry (including courses on the preceding list) and approved by a concentration advisor.

7. Two semester courses of independent research approved by a concentration advisor (BIOL 1950/1960 or CHEM 0970, 0980).

(Note that the mathematics and physics requirements may be satisfied by Advanced Placement credit.)

Biology

Standard program for the A.B. Biology

The concentration program for the A.B. in Biology consists of four prerequisite courses in math and chemistry (Part A) and ten courses in biological sciences (Part B), including courses in each of the following three areas: Area 1: Cell/Molecular Biology, Area 2: Structure/Function, and Area 3: Organismal Biology. Beyond the area requirement, students may choose up to two, upper-level science courses from an approved selection for science concentrators.

Parts A and B are required:

Part A: Prerequisite Courses

Students are required to take the following courses. AP scores above four (4) may substitute.

- MATH 0090 Introductory Calculus, Part I, or equivalent placement.
- MATH 0100 Introductory Calculus, Part II, or MATH 0170 Advanced Placement Calculus, or equivalent placement, or a Statistics course, to be approved by the concentration advisor.
- CHEM 0330 Equilibrium, Rate and Structure; CHEM 0350 Organic Chemistry

Part B, Core Courses

Ten courses, which may be chosen from BIOL and/or NEUR offerings for concentrators, must include:

- BIOL 0200 (AP credit accepted; placement test available).
- At least two BIOL or NEUR courses must be above 1000-level.
- At least three of the BIOL or NEUR courses must include lab or fieldwork.
- The Area requirement must be fulfilled by taking at least one course in each of these groups.

- Area 1 (Cell/Molecular Biology) BIOL 0280, 0470, 0500, 0510, 0530, 1050, 1100, 1310; NEUR 1020.
- Area 2 (Structure/Function) BIOL 0310, 0320, 0400, 0440, 0800, 1100, 1800, 1880; NEUR 0010.
- Area 3 (Organismal Biology) BIOL 0380, 0390, 0400, 0410, 0420, 0430, 0460, 0480, 1410, 1430, 1460, 1800, 1880; ENVS 0455, 0490, 1455.

(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.)

Options within the Core may include up to two related sciences which are approved courses for science concentrators, as follows:

- GEOL: 0220 or above.
- CHEM: above the prerequisite courses used.
- CLPS (physiological psychology): e.g., 0400, 0110, 0410, 1140, 1193 (formerly PSYC 0470; 0500; 0750; 1020; 1040).
- CSCI: 0040 and above.
- APMA: 0330 and above (except 0420).
- MATH: 0180 and above.
- PHYS: 0470 and above.
- Courses in the history or philosophy of science (e.g., HIST 1190); also BIOL 1920.
- Statistics: e.g., SOC 1100; CLPS 0900 (formerly PSYC 0090; COGS 0090); APMA 0650; MATH 1600; EDUC 1110; ECON 1620.

Note: Related sciences must be above prerequisite level, and suitable for science concentrators.

BIOL 1950/1960, (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.

Honors: Honors in biology requires a thesis and presentation based on a research project (conducted via BIOL 1950/1960), and quality grades in the concentration. Guidelines, a manual, and information on faculty research are available in the Biology Undergraduate Affairs Office (Arnold, Room 124) or at the Research Projects Collection found at http://biology.brown.edu/bug/honors.

Standard Program for the Sc.B. Biology

The concentration program for the Sc.B. in Biology consists of four prerequisite courses in math and chemistry (Part A) and ten courses in biological sciences (Part B), including courses in each of the following three areas: Area 1: Cell/Molecular Biology, Area 2: Structure/Function, and Area 3: Organismal Biology. Part C, an additional three course advanced cluster. Part B also requires research (BIOL 1950/1960), which should reflect the advanced cluster.

Parts A, B, and C are required:

Part A (AP scores of 4 or 5 may substitute):

Mathematics: MATH 0090; 0100; (or 0170); or equivalent placement.

Chemistry: CHEM 0330; 0350; 0360.

Physics: PHYS 0030; 0040 (or PHYS 0050/0060; or ENGN 0030; 0040).

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Part C, Thematic Cluster Courses:

Three additional biological sciences courses (not including BIOL 1950/1960 research) that form a logical thematic cluster as follows:

- 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 Dean Thompson.
- Examples of thematic clusters include: Molecular Biology; Immunology; Ecology and Evolutionary Biology; Physiology and Biotechnology; Neurobiology; Physical Sciences.

Honors: Same requirements as described under A.B. Biology.

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.

2. No more than two semesters of directed research may be used as concentration credits.

3. Transfer or study abroad courses may be used within the program, subject to approval of advisor, and Dean Thompson.

Biomedical Engineering

Biomedical Engineering is 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. It is administered jointly by the School of Engineering and the Division of Biology and Medicine. The educational objectives of Biomedical Engineering are: to prepare students for careers of useful service to society; to engage committed scholars in the productive application of the tools of engineering to the subject matter of biology across the spectrum of research and teaching; and to provide opportunities for teamwork, open ended problem-solving and critical thinking. The program's primary emphasis is on developing strong biomedical engineering fundamentals, while allowing students to personalize their curriculum to prepare them for biomedical engineering careers as well as diverse careers in areas such as medicine, law, business, and health care delivery. These objectives address the expected accomplishments of program graduates, primarily in the time period of several years following graduation. The objectives prepare students: 1) well versed in the basic sciences of mathematics, physics, and chemistry; 2) fluent in contemporary biology, comfortable with its reductionist traditions and its movement toward a molecular understanding, and familiar with its experimental essays; 3) educated in the tools and skill-sets of engineers, particularly the ability to quantify, synthesize, and integrate, and able to apply these tools both theoretically and experimentally to living systems and other subject matter in biology; 4) well prepared to complete their education and training in further study at the graduate or professional level, and conditioned to recognize the need for such further work; and 5) endowed with the attributes of an education in a leading liberal arts institution: the ability to think clearly, decide fairly, and communicate effectively.

Standard program for the Sc.B. degree

1. Foundation Courses (all required):
   - ENGN 0030 Introduction to Engineering
   - ENGN 0040 Dynamics and Vibrations
   - MATH 0190 (or MATH 0170) Advanced Placement Calculus*
   - MATH 0200 (or MATH 0180) Intermediate Calculus *
   - BIOL 0200 (or NEUR 0010) Introductory Biology/Neuroscience **
   - APMA 0330 Methods of Applied Math
   - CHEM 0330 Equilibrium, Rate and Structure
   - CHEM 0350 Organic Chemistry
   - APMA 0650 (or APMA 1650 or SOC 1100) Statistics
   - ENGN 0510 Electricity and Magnetism
   - ENGN 0720 Thermodynamics
   - ENGN 0810 Fluid Mechanics
   - ENGN 1230 Instrumentation Design
   - BIOL 0800 Principles of Physiology

   * Advanced students can replace one math course with CHEM 0360.
   ** Advanced students (premeds) can replace with BIOL 0470, BIOL 0530, or other biology courses.

2. Upper Level Bioengineering Courses (all required):
   - ENGN 1110 Transport and Biotransport Processes
   - ENGN 1210 Biomechanics
   - ENGN 1490 Biomaterials

3. Three Additional Upper Level Bioengineering Courses:

   At least one from:
   - BIOL 1140 Tissue Engineering
   - BIOL 1150 Stem Cell Engineering
   - ENGN 1220 Neuroengineering
   - ENGN 1400 Analytical Methods in Biomaterials
   - ENGN 1930B Biophotonics
   - ENGN 1930R Molecular and Cell Biology for Engineers

   At most 2 from:
   - BIOL 1220 Synthetic Biological Systems in Theory and Practice
   - BIOL 1800 Animal Locomotion
   - BIOL 2110 Drug and Gene Delivery
   - BIOL 2130 Techniques in Molecular and Cell Science

4. Capstone Design course (required):

   Other courses with approval of concentration advisor.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
A defining characteristic of 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. Because of this breadth of subject matter, the Biophysics concentration at Brown prepares students for careers in many fields, including academic or industrial research, health careers, teaching and patent law. Additional detailed information about the field of Biophysics may be found at: http://www.biophysics.org/AboutUs/Biophysics/tabid/517/Default.aspx.

**Requirements**

1. PHYS 0050, 0060 (or 0070, 0160) and 0470.
2. CHEM 0330, 0350, 0360 and one of the following: CHEM 0400, 1140; PHYS 1530 or 1610.
3. MATH 0100 and 0180 (or equivalents).
4. BIOL 0200, and two additional biology courses chosen with approval of the advisor. Examples include courses in cell biology (BIOL 0500, 1050, 1200), physiology (BIOL 0800, 1100, 1190, NEUR 1020), pharmacology (BIOL 1260), and biotechnology (BIOL 1090, 1120, or 1140).
5. 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, 0470, 0800, 1190), physics (PHYS 0500, 0560, 1410, 1420 and 1610), mathematics (MATH 0520), applied mathematics (APMA 0330, 0340; or 0350, 0360), and chemistry (CHEM 1230, 1450 and 1560).
6. At least one semester (two are recommended) of Directed Research in biology (BIOL 1950/1960), chemistry (CHEM 0970/0980) or physics (PHYS 1990).

**Chemical Physics**

This 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.

**Standard program for the Sc.B. degree**

- ENGN 1930L Biomedical Engineering Design, Research and Modeling
- ENGN 1970, 1971 Independent Study, or
- BIOL 1950/1960 Directed Research/Independent Study

**Undergraduate Concentrations**

- **Biophysics**

  **Standard program for the Sc.B. degree**

  Twenty semester courses in chemistry, physics, and mathematics, with a minimum of four semester courses in mathematics. Core courses are:

  - CHEM 0330, 0350, 0500, and 1140
  - PHYS 0070, 0160, and 0470
  - CHEM 0970, 0980, 1060, 1140, 1150, 1160
  - MATH 0190, 0200, and 0520

  Seven courses, primarily at the 1000 or 2000 level, in chemistry or physics

  Two semesters of independent study: CHEM 0970, 0980 or PHYS 1990.

  Other approved courses in applied mathematics, biology, computer science, geological sciences, or engineering may be substituted for some of the twenty.

  Students are advised to take at least six courses in the humanities and social sciences.

- **Chemistry**

  **Standard program for the A.B. degree**

  CHEM 0330, 0350, 0360, 0500, 1140, 1150, 1160, plus two advanced science/math electives,* at least 1 must be a chemistry course.

  Note that the physical chemistry courses (CHEM 1140, 1150, 1160) have mathematics and physics prerequisites.

  * BIOL 0280 is credited as an elective for the chemistry concentration.

  **Standard program for the Sc.B. degree**

  The Chemistry Department offers three tracks for the Sc.B. Chemistry Concentration – a Chemistry track, a Chemical Biology track and a Materials Chemistry track. These tracks are not separate concentrations – your degree will still be an Sc.B. in Chemistry. The Chemical Biology track is designed for students who have a strong interest in the interface of chemistry with biology. The Materials Chemistry track is designed for students who have a strong interest in the interface of chemistry with nanoscience and materials science.

  **Concentrating in Chemistry – Three tracks**

  The required/recommended courses for the three tracks are given below.

  - **Chemistry track**: CHEM 0330, 0350, 0360, 0500, 0970, 0980, 1140, 1150, 1160; 2 Math; 2 Physics; and 7 electives (at least 3 must be Chemistry); 20 total courses
  - **Chemical Biology Track**: CHEM 0330, 0350, 0360, 0400, 0970, 0980, 1140, 1230, 1240; BIOL 0280; 2 Math; 2 Physics; 3 courses from the following [BIOL 0470; BIOL 0500; BIOL 0510; BIOL 0530; BIOL 0800; NEUR 1020]; and 3 other electives; 20 total courses
  - **Materials Chemistry track**: CHEM 0330, 0350, 0360, 0500, 0970, 0980, 1060, 1140, 1150, 1700; 2 Math; 2 Physics;

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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BIOL 1090; and 5 electives, at least 2 must be chemistry courses; 20 total courses (For students with a more Engineering bent, the following substitutions can be made – ENGN 0030/0040 can be substituted for PHYS; ENGN 0410 can be substituted for CHEM 1060; ENGN 0720 for CHEM 1150)

* BIOL 0280 is credited as an elective for the chemistry concentration.

In each of these cases, 0970/0980 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. A thesis is required to be eligible for graduation with Honors.

**Classics**

Programs of concentration may be arranged with emphasis on the ancient languages and literature or on ancient history and culture. There is one standard concentration track, Classics, and four optional concentration tracks, Greek, Latin, Greek and Latin, or Sanskrit, from which to choose. All tracks except "Greek 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.

Concentrators are strongly encouraged to integrate their studies in various fields of Classics by writing a senior thesis (which can, but need not, be an honors thesis); is more demanding than an ordinary term paper; and preferably transcends the subject matter of one particular subdiscipline of classics); by participating in a seminar for juniors and seniors (which is designed to provide insight into the relationships among various parts of ancient studies); or by undertaking another kind of senior project that achieves the same goals and is acceptable to the department.

**Classics:**

1. One course in Greek or Latin on the 1000-level or above.

2. CLAS 1210, 1220 or 1310, 1320 (Greek or Roman history).

3. Five other courses in classics, including classical archaeology, Greek, Latin, Sanskrit, or related areas to be approved by the concentration advisor.

**Optional tracks:**

Greek:

1. Four Greek courses on the 1000-level or above, at least one of which is to be GREK 1810 or 1820.

2. CLAS 1210, 1220 (Greek history).

Latin:

1. Four Latin courses on the 1000-level or above, at least one of which is to be LATN 1810 or 1820.

2. CLAS 1310, 1320 (Roman history).

3. Two additional courses in classics, including classical archaeology, Greek, Latin, or related areas to be approved by the concentration advisor.

Greek and Latin:

1. Four Latin courses on the 1000-level or above, at least one of which is to be LATN 1810 or 1820.

2. Four Greek courses on the 1000-level or above, at least one of which is to be GREK 1810 or 1820.

3. CLAS 1210, 1220 and CLAS 1310, 1320 (Greek and Roman history).

Sanskrit:

1. Four 1000-level courses in Sanskrit.

2. The requirements for Classics, Greek, or Latin with the provision that courses in Sanskrit beyond the first four may count towards the "five other courses" required of concentrators in Classics, or the "two additional courses" required of concentrators in Greek and of concentrators in Latin. (Students interested in Sanskrit may compare the concentration in South Asian Studies—Ancient India.)

**Honors**

Students may earn honors in each concentration by presenting a satisfactory thesis, for the preparation of which they will ordinarily enroll in the relevant 1970 and 1990 courses; these courses may not be used to satisfy the standard requirements for a concentration. In order to qualify for honors, students must maintain a B average overall.

**Cognitive Neuroscience**

Cognitive neuroscience is the study of higher cognitive functions in humans and its underlying neural bases. By definition, it is an integrative area of study drawing principally from cognitive science, psychology, neuroscience, and linguistics. There are two broad directions which can be taken in this concentration—one is behavioral/experimental and the other is computational/modeling. In either case, the goal is to understand the nature of cognition from a neural perspective.

**Standard program for the ScB degree**

**Concentration Courses**

A total of 16 courses are required for the concentration. Each student is required to pass 9 courses designed to introduce students to the

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
foundations (5), systems level and integrative aspects (4) which uniquely define cognitive neuroscience; two laboratory courses; four elective courses; and either a senior seminar course CLPS 1900 (COGS 1950) or an independent research course. The laboratory and elective courses should fit within a particular theme or category such as general cognition, vision, language, or computational/modeling. The design of the concentration and selection of courses should be made in consultation with the faculty advisor.

Foundations:

- BIOL 0200, The Foundation of Living Systems
- CLPS 0200 (COGS 0420), Human Cognition
- CLPS 0900 (COGS/PSYC 0090), Quantitative Methods in Psychology, APMA 1650, Statistical Inference, or CLPS 2906 (PSYC 2060), Experimental Design
- MATH 0090, Introductory Calculus (or the equivalent)
- NEUR 0010, Introduction to Neuroscience

Note: Students wishing to pursue a computational/modeling track are encouraged to take APMA 1650.

Systems Level and Integrative Courses:

- CLPS 0040 (COGS 0720) Introduction to Cognitive Neuroscience
- CLPS 0400 (PSYC 0470), Brain Damage and the Mind
- CLPS 1291 (COGS 1280), Computational Cognitive Science, CLPS 1492 (COGS 1460), Laboratory in Computational Cognitive Neuroscience, or APMA 0410 Mathematic Methods in the Brain Sciences
- NEUR 1030, Neural Systems

Laboratory Courses

Students must choose two laboratory courses. Please note that due to enrollment limits in some lab courses, priority may be given to concentrators in that department. Students should therefore be prepared to choose from the other laboratory options.

- CLPS 1090 (PSYC 1090), Research Methods in Psychology
- CLPS 1190 (PSYC 1030), Techniques in Physiological Psychology
- CLPS 1192 (PSYC 1200), Animal Learning and Behavior Laboratory
- CLPS 1193 (PSYC 1040), Laboratory in Genes and Behavior
- CLPS 1290 (COGS 1530), Laboratory in Cognitive Processes
- CLPS 1490 (PSYC 1840), Functional Magnetic Resonance Imaging: Theory and Practice
- CLPS 1491 (COGS 1020), Neural Modeling Laboratory
- CLPS 1510 (PSYC 1190), Human Sensory Processing
- CLPS 1690 (COGS 1610), Laboratory in Cognitive Development
- CLPS 1791 (PSYC 1540), Laboratory in Social Cognition
- CLPS 1890 (COGS 1450), Research in Psycholinguistics
- CLPS 1891 (COGS 1240), Research Methods in Psycholinguistics and Acoustic Phonetics
- CLPS 1970 (COGS 1970; PSYC 1990); NEUR 1970, Independent Study (may be used for only one laboratory)
- NEUR 1600, Experimental Neurobiology
- NEUR 1650, Structure of the Nervous System

Electives

Four additional courses around a particular theme. Normally only one elective course that is below the 1000-level may count towards the elective courses required. An appropriate (but additional) laboratory course may be used in lieu of one of the four elective courses. Appropriate Topics course offerings (not listed below) may also count as electives with the approval of the concentration advisor.

- Primarily behavioral/experimental:
  - CLPS 0040 (COGS 0720), Mind and Brain: Introduction to Cognitive Neuroscience
  - CLPS 0210 (COGS 0480), Human Thinking and Problem Solving
  - CLPS 0220 (COGS 0500), Making Decisions
  - CLPS 0410 (PSYC 0750), Principles of Behavioral Neuroscience
  - CLPS 0500 (COGS/PSYC 0440), Perception and Mind
  - CLPS 0600 (PSYC 0810), Child Development
  - CLPS 0610 (COGS 0630), Children's Thinking: The Nature of Cognitive Development
  - CLPS 0800 (COGS 0450), Language and the Mind
  - CLPS 0810 (COGS 0320), Biology and Evolution of Language
  - CLPS 1100 (PSYC 1800), Animal Cognition
  - CLPS 1130 (PSYC 1790), Psychology of Timing
  - CLPS 1140 (PSYC 1020), Psychophysiology of Sleep and Dreams
  - CLPS 1180B (PSYC 1750A), Biology of Communication
  - CLPS 1200 (COGS 1520), Thinking
  - CLPS 1210 (COGS 15600), Human Memory and Learning
  - CLPS 1220 (COGS 1870), Concepts and Categories
  - CLPS 1230 (COGS 1860Y), Making Decisions
  - CLPS 1240 (COGS 1880), Reasoning and Problem Solving
  - CLPS 1241 (COGS 1860C), Causal Reasoning
  - CLPS 1320 (COGS 1230), Production, Perception and Analysis of Speech
  - CLPS 1470, Mechanisms of Motivated Decision Making
  - CLPS 1500 (COGS 1380), Ecological Approach to Perception and Action
  - CLPS 1510 (PSYC 1190), Human Sensory Processing
  - CLPS 1520 (COGS 1200), Computational Vision
  - CLPS 1530 (COGS 1860B), 3D Shape Perception
  - CLPS 1590 (COGS 1440), Visualizing Vision
  - CLPS 1610 (COGS 1180), Cognitive Development
  - CLPS 1611 (COGS 1620), Cognitive Development in Infancy
  - CLPS 1620 (COGS 1190), Developmental Cognitive Neuroscience
  - CLPS 1650 (COGS 1430), Child Language Acquisition
  - CLPS 1800 (COGS 1410), Language Processing
  - CLPS 1810 (COGS 1420), Syntactic Theory and Syntactic Processing
  - CLPS 1820 (COGS 1480), Language and the Brain
  - CLPS 1821 (COGS 1840B), Neuromaging and Language
  - CLPS 1822 (COGS 1500), Subcortical Bases of Language and Thought
  - NEUR 0650, Biology of Hearing

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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- NEUR 0660, Biology of Vision
- NEUR 1680, Computational Neuroscience
- NEUR 1710, Neuroimaging
- NEUR 1740, The Diseased Brain: Mechanisms of Neurological and Psychiatric Disorders
- NEUR 1930A, Cognitive Neuroscience: Motor Learning
- NEUR 1930B, From Neurophysiology to Perception
- NEUR 1930F, Brain Interfaces for Humans
- NEUR 1940A, Cognitive Neuroscience

Primarily Computational/Modeling:

Students are advised to take APMA 0330 (Methods of Applied Analysis I) and APMA 0340 (Methods of Applied Analysis II) as their two supporting science courses. Note that MATH 0100 is a prerequisite for these courses. See CLPS listings (above) for other computational/modeling courses. See CLPS topics listing for other computational/modeling courses.

- APMA 1360, Topics in Chaotic Dynamics
- CLPS 1291 (COGS 1280), Computational Cognitive Science
- CLPS 1470, Mechanisms of Motivated Decision Making
- CLPS 1492 (COGS 1460), Laboratory in Computational Cognitive Neuroscience
- CLPS 1550 (PSYC 1520), The Psychology of Aversion
- CSCI 1410, Introduction to Artificial Intelligence
- CSCI 1430, Introduction to Computer Vision
- CSCI 1460, Introduction to Computational Linguistics
- CSCI 1480, Building Intelligent Robots
- CSCI 1950A, Computational Modeling and Algorithmic Thinking
- ENGN 1220, Neuroengineering
- ENGN 1610, Image Understanding
- NEUR 1680, Computational Neuroscience

Honors

Students who would like to pursue a degree with honors are normally expected to have half of their grades as A (or equivalent) within the concentration and are required to satisfactorily complete a written thesis and an oral presentation.

Cognitive Science

Cognitive Science is the study of mental abilities such as perception, action, speech, memory, thinking, and language, and their bases in the brain, using scientific methods of experimentation, computational modeling, and brain imaging. The undergraduate concentration is designed to provide a flexible interdisciplinary approach with four areas of emphasis: perception, cognition, language, and cognitive neuroscience. Course work in related departments is encouraged. A Cognitive Science degree provides excellent preparation for careers in the sciences, computer fields, health professions, law, and education.

The A.B. program requires 13 credits and is primarily for students interested in studying human mental processes. The Sc.B. program requires 18 courses and is intended for students who also have strong interests in an affiliated area such as artificial intelligence, computational modeling, or cognitive neuroscience. Prospective concentrators should register for CLPS0020, preferably in their freshman or sophomore year.

I. Standard program for the A.B. degree: 13 courses

Gateway:

- Introduction to Cognitive Science CLPS 0020 (formerly COGS 0010) or Alternative (with permission of Concentration Advisor)

Required core courses:

- Cognition: Human Cognition CLPS 0200 (formerly COGS 0420)
- Language: Introduction to Linguistic Theory CLPS 0030 (formerly COGS 0410)
- Perception: Perception and Mind CLPS 0500 (formerly COGS 0440/PSYC 0440)
- Cognitive Neuroscience:
  - Introduction to Neuroscience NEUR 0010
  - Introduction to Cognitive Neuroscience CLPS 0040

Required courses in skills and methodology:

- One Experimental Laboratory Course such as CLPS 1090, CLPS 1190, CLPS 1192, CLPS 1290, CLPS 1490, CLPS 1590, CLPS 1690, or CLPS 1690
- One Basic Computation Course such as CLPS 1291, CLPS 1491, or CLPS 1942, CSCI 0040, CSCI 0150, CSCI 0170, CSCI 0180
- One course in Statistical Analysis such as CLPS 0900, APMA 0650, or APMA 1650 (Note: Students cannot use an AP Statistics course in lieu of this requirement.)

Required Capstone:

- Senior Seminar CLPS 1900 (formerly COGS 1950)

Electives:

Students must complete 4 additional courses, chosen from relevant courses in Cognitive Science offered in the CLPS department as well as departments across the University. In most cases, electives must be at the 1000-level and must show coherence and provide the concentrator with depth in one or more focus areas. Only one course below the 1000-level can be included in this list, and only with permission of the concentration advisor. Example electives and possible fields of study are shown in the Appendix of this document. Students are strongly encouraged to work out their program of electives with the concentration advisor.

II. Standard program for the Sc.B. degree: 18 Courses

- All of the requirements for the A.B. degree.
- At least one semester of Independent Study CLPS 1970 (COGS 1970), OR participation in a directed reading related to Cognitive Sciences (CLPS 1980) OR participation in an ISP or GISP related to Cognitive Science (subject to approval from the concentration advisor). See Section IV for more details.
- A coherent program of at least four (4) additional courses in the life sciences (e.g., cognitive science, psychology, or biology), physical sciences, mathematics, and/or applied mathematics that supports the student's area(s) of study. Many acceptable supporting science programs are possible.
III. Degrees with Honors

Students interested in honors under either the A.B. or Sc.B. programs should identify a faculty honors sponsor and sign up with the concentration advisor during Semester 6. Although there is no minimum grade point average to enter the program, admission to the program is limited to students who have accumulated a strong academic record and is at the discretion of the department. It is expected that honors candidates will conduct a year-long research project under the direction of a faculty sponsor culminating in a written thesis and oral examination at the end of Semester 8. Students doing honors work may enroll for CLPS 1970 (COGS 1970) for two terms.

IV. Independent Study

Independent Study is encouraged for the A.B. degree and required for the Sc.B. degree. Students should sign up for clps 1970 (COGS 1970) with a faculty advisor who is a member of the Department of CLPS Department. Arrangements should be made in Semester 6 for students expecting to do independent study during Semesters 7 and/or 8.

Cognitive Science concentrators may use at most two credits of CLPS 1970 towards their degree. Students in the A.B. program can use these two credits to satisfy electives. Students in the Sc.B. program must use one of these credits to satisfy the Independent Study requirement (Requirement B in Section II above), and may use the second to satisfy an elective or one of the four additional courses (Requirement C in Section II).

V. Comments

Both the A.B. and the Sc.B programs in Cognitive Science reflect recent national trends in the field and the breadth of the course offerings and faculty research interests at Brown. A broadly trained cognitive scientist must possess certain methodological skills, including knowledge of computational methods and research methods (statistics and laboratory techniques), which are incorporated in our skills and methodology requirement. In addition, a cognitive scientist must be conversant in the four major focus areas studied in the field: perception, cognition, languages and cognitive neuroscience. Electives ensure that concentrators have the opportunity to investigate at least one particular area in depth. Finally, the concentration provides an integrative experience to all of its concentrators through the capstone senior seminar. The program is designed to provide the flexibility for each student to design a program that will meet her/his needs and interests.

The Sc.B. program is designed for students who wish to bring a stronger background in general science and a research orientation to their study of cognition. Such background is particularly important for students wishing to emphasize cognitive neuroscience, artificial intelligence, or other computational approaches to the study of cognition. Sc.B. candidates must also acquire first-hand experience in doing cognitive science research through an independent study project.

Appendix A: Electives:

The following are a list of courses that could satisfy the electives requirement for the A.B. degree or the four additional courses necessary for the Sc.B degree. Because of the changing availability and the nature of the curriculum of the CLPS department and the University, this list is not exhaustive and varies from year to year. Other courses may occasionally be substituted with permission of the concentration advisor. Note that most of the courses for electives must be at the 1000-level. Exceptions can be made through discussion with the concentration advisor.

- ANTH 0200 Culture and Human Behavior
- ANTH 0800 Sound and Symbols: Introduction to Linguistic Anthropology
- ANTH 1800 Sociolinguistics, Discourse, and Dialogue
- APMA 1360 Topics in Chaotic Dynamics
- APMA 1650 Statistical Inference I
- APMA 1660 Statistical Inference II
- APMA 1670 Statistical Methods of Time Series
- APMA 1680 Nonparametric Statistics
- APMA 1690 Computational Probability and Statistics
- BIOL 0450 Animal Behavior: Ecological and Evolutionary Determinants
- BIOL 0480 Evolutionary Biology
- BIOL 1400 Evolutionary and Ecological Determinants of Animal Behavior
- NEUR 0650 Biology of Hearing
- NEUR 1030 Neural Systems
- NEUR 1040 Developmental Neurobiology
- NEUR 1660 Neural Basis of Cognition
- NEUR 1680 Computational Neuroscience
- CLPS 0100 Learning and Conditioning
- CLPS 0210 Human Thinking and Problem Solving
- CLPS 0220 Making Decisions
- CLPS 0400 Brain Damage and the Mind
- CLPS 0510 Perception, Illusion and the Visual Arts
- CLPS 0530 Making Visual Illusions
- CLPS 0600 Child Development
- CLPS 0610 Children’s Thinking: Introduction to Cognitive Development
- CLPS 0800 Language and the Mind
- CLPS 0810 Biology and Evolution of Language
- CLPS 1100 Animal Cognition
- CLPS 1130 Psychology of Timing
- CLPS 1200 Thinking
- CLPS 1210 Human Memory and Learning
- CLPS 1211 Human and Machine Learning
- CLPS 1220 Concepts and Categories
- CLPS 1240 Reasoning and Problem Solving
- CLPS 1241 Causal Reasoning
- CLPS 1330 Introduction to Syntax
- CLPS 1340 Introduction to Semantics
- CLPS 1341 Lexical Semantics
- CLPS 1342 Formal Semantics
- CLPS 1350 Introduction to Mathematical Linguistics
- CLPS 1400 Neural Basis of Cognition
- CLPS 1470 Mechanisms of Motivated Decision Making
- CLPS 1500 Ecological Approaches to Perception and Action
- CLPS 1510 Human Sensory Processing
- CLPS 1520 Computational Vision
- CLPS 1530 3D Shape Perception
- CLPS 1540 Human Factors
- CLPS 1600 History and Theories of Child Development
- CLPS 1610 Cognitive Development
- CLPS 1611 Cognitive Development in Infancy
- CLPS 1620 Developmental Cognitive Neuroscience
- CLPS 1621 The Developing Brain

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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- CLPS 1630 Perceptual Development
- CLPS 1650 Child Language Acquisition
- CLPS 1730 Psychology of Business and Economics
- CLPS 1800 Language Processing
- CLPS 1810 Syntactic Theory and Processing
- CLPS 1820 Language and the Brain
- CLPS 1821 Neuroimaging and Language
- CLPS 1822 Subcortical Brain Basis of Language and Thought
- CLPS 1970 Independent Study
- CLPS 1280, 1380, 1480, 1580, 1680, 1880 most courses in CLPS (See Concentration Advisor for Details)
- CSCI 0220 Introduction to Discrete Mathematics
- CSCI 0510 Models of Computation
- CSCI 1230 Introduction to Computer Graphics
- CSCI 1410 Introduction to Artificial Intelligence
- CSCI 1480 Building Intelligent Robots
- EDUC 1260 Emotion, Cognition, Education
- EDUC 1270 Adolescent Psychology
- ENGN 1220 Neuroengineering
- ENGN 1570 Linear System Analysis
- ENGN 1580 Communication Systems
- ENGN 1610 Image Analysis
- PHIL 0020 Mind and Matter
- PHIL 0210 Science, Perception and Reality
- PHIL 0230 Human Knowledge and Truth
- PHIL 0360 Early Modern Philosophy
- PHIL 0540 Logic
- PHIL 1520 Consciousness
- PHIL 1550 Decision Theory: Foundations and Applications
- PHIL 1590 Philosophy of Science
- PHIL 1630 Deductive Logic
- PHIL 1690 The Problem of Free Will
- PHIL 1700 British Empiricists
- PHIL 1750 Epistemology
- PHIL 1760 Philosophy of Language
- PHIL 1770 Philosophy of Mind
- PHIL 1780 Philosophy of Biology
- PHIL 1880 Advanced Deductive Logic

Appendix B: Elective Focus Areas

The following are suggestions for collections of four courses that make up a coherent focus areas of study in Cognitive Science. This list is not meant to be exclusive, and we encourage students to create their own areas of study from existing courses. These are merely suggestions, as many courses are interchangeable. Occasionally, ONE course below the 1000-level can be substituted. An individual student’s interests will determine his/her program of study. Conversation with the concentration advisor is strongly encouraged.

- **Artificial Intelligence**
  - Thinking (CLPS 1200)
  - Introduction to Artificial Intelligence (CSCI 1410)
  - Building Intelligence Robots (CSCI 1480)
  - Philosophy of Mind (PHIL 1770).
  - Note: Students would be encouraged to take Laboratory in Cognitive Processes (CLPS 1290) as a Lab Course and Computational Cognitive Sciences (CLPS 1291) as a Computational Course to supplement this focus. Making Decisions (CLPS0220) could be acceptable here as an alternative.

- **Cognitive Development**
  - Cognitive Development (CLPS 1610)
  - Cognitive Development in Infancy (CLPS 1611)
  - Emotion, Cognition, and Education (EDUC 1260)
  - Child Language Acquisition (CLPS 1650).
  - Note: Students would be encouraged to take Laboratory in Developmental Methods (CLPS 1690) as a Lab Course to supplement this focus. Children’s Thinking (CLPS0610) could be acceptable here as an alternative.

- **Cognitive Neuroscience**
  - Neural Basis of Cognition (CLPS 1400)
  - Topics in Cognitive Neuroscience (CLPS 1480)
  - Language and the Brain (CLPS 1820)
  - Philosophy of Biology (PHIL 1780).
  - Note: Students would be encouraged to take Laboratory in fMRI Methods (CLPS 1490) as a Lab Course and/or Neural Modeling (CLPS 1491) or Computational Cognitive Neuroscience (CLPS 1492) as a Computational Course to supplement this focus.

- **Computational Modeling**
  - Introduction to Mathematical Linguistics (CLPS 1350)
  - Computational Vision (CLPS 1520)
  - Statistical Inference I and II (APMA 1650/1660).
  - Note: Students would be encouraged to take Computational Cognitive Sciences (CLPS 1291) as a Computational Course to supplement this focus.

- **Consciousness**
  - Thinking (CLPS 1200)
  - Consciousness (PHIL 1520)
  - Epistemology (PHIL 1750)
  - Philosophy of Mind (PHIL 1770).
  - Note: Students would be encouraged to take Laboratory in Cognitive Processes (CLPS 1290) and/or Laboratory in fMRI Methods (CLPS 1490) to supplement this focus. A lower-level philosophy course could also be appropriate here.

- **Developmental Cognitive Neuroscience**
  - History and Theories of Child Development (CLPS 1600)
  - Cognitive Development (CLPS 1610)
  - Developmental Cognitive Neuroscience (CLPS 1620)
  - The Developing Brain (CLPS 1621).
  - Note: Students would be encouraged to take Laboratory in Developmental Methods (CLPS 1690) as a Lab Course and Computational Cognitive Neuroscience (CLPS 1492) as a Computational Course to supplement this focus. Children’s Thinking (CLPS0610) could be acceptable here as an alternative.

- **Judgment and Reasoning**
  - Thinking (CLPS 1200)
  - Reasoning and Problem Solving (CLPS 1240)
  - Causal Reasoning (CLPS 1241)
  - Psychology of Business and Economics (CLPS 1730).
  - Note: Students would be encouraged to take Laboratory in Cognitive Processes (CLPS 1290) as a Lab Course and Computational Cognitive Sciences (CLPS 1291) as a Computational Course to supplement this focus. Making Decisions (CLPS0220) could be acceptable here as an alternative.
Course to supplement this focus. Making Decisions (CLPS0220) could be acceptable here as an alternative.

- **Learning and Memory**
  - Thinking (CLPS 1200)
  - Human Memory and Learning (CLPS 1210)
  - Concepts and Categories (CLPS 1220)
  - Human and Machine Learning (CLPS1221).
  - Note: Students would be encouraged to take Laboratory in Cognitive Processes (CLPS 1290) as a Lab Course and Computational Cognitive Sciences (CLPS 1291) as a Computational Course to supplement this focus. Learning and Condition (CLPS0100) could be acceptable here as an alternative.

- **Neuroeconomics**
  - Thinking (CLPS 1200)
  - Psychology of Business and Economics (CLPS 1730)
  - The Neural Basis of Cognition (CLPS 1400)
  - Mechanisms of Motivated Decision Making (CLPS 1470).
  - Note: Students would be encouraged to take Laboratory in Cognitive Processes (CLPS 1290) and/or Laboratory in IMRI Methods (CLPS 1490) to supplement this focus. Courses in Economics or Philosophy could be appropriate here.

- **Neural Modeling**
  - Neural Basis of Cognition (CLPS 1400)
  - Neuroengineering (ENGN 1220)
  - Linear Systems Analysis (ENGN 1570)
  - Philosophy of Biology (PHIL 1780).
  - Note: Students would be encouraged to take Laboratory in IMRI Methods (CLPS 1490) as a Lab Course and/or Neural Modeling (CLPS 1491) and/or Computational Cognitive Neuroscience (CLPS 1492) as a Computational Course to supplement this focus.

- **Neurolinguistics**
  - Language Processing (CLPS 1800)
  - Language and the Brain (CLPS 1820)
  - Neuroimaging and Language (CLPS 1821)
  - Subcortical Brain Basis of Language and Thought (CLPS 1822).
  - Note: Students would be encouraged to take Laboratory in IMRI Methods (CLPS 1490) as a Lab Course and/or Neural Modeling (CLPS 1491) and/or Computational Cognitive Neuroscience (CLPS 1492) as a Computational Course to supplement this focus. Language and Mind (CLPS0800) or Biology and Evolution of Language (CLPS0810) could be appropriate here.

- **Perception and Action**
  - Ecological Approaches to Perception and Action (CLPS 1500)
  - Mechanisms of Motivated Decision Making (CLPS 1470)
  - Consciousness (PHIL 1520)
  - The Problem of Free Will (PHIL 1690).
  - Note: Students would be encouraged to take Laboratory in Visual Perception (CLPS 1590) to supplement this focus.

- **Psycholinguistics**
  - Language Processing (CLPS 1800)
  - Child Language Acquisition (CLPS 1650)
  - Syntactic Theory and Processing (CLPS 1810)
  - Philosophy of Language (PHIL 1760).

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- Note: Students would be encouraged to take Laboratory in Phonetics and Phonology (CLPS 1390) to supplement this focus. Language and Mind (CLPS0800) could be appropriate here.

- **Visual Perception**
  - Ecological Approaches to Perception and Action (CLPS 1500)
  - Human Sensory Processing (CLPS 1510)
  - 3D Shape Perception (CLPS 1530)
  - Perceptual Development (CLPS 1630).
  - Note: Students would be encouraged to take Visualizing Vision (CLPS 1590) as a Laboratory class to supplement this focus. Perception and Visual Illusions (CLPS 0510) could be appropriate here.

**Commerce, Organizations and Entrepreneurship**

*Introduction*

Commerce, Organizations and Entrepreneurship (COE) is a multidisciplinary, multi–track undergraduate concentration that provides students with a rigorous and synergistic program in the study of commercial activity grounded in Economics, Sociology and Engineering. COE focuses on the formation, growth, and organization of new ventures, innovation in commercial applications, financial markets and the marketplace, and management and organizational theory.

Students first complete a set of courses that provide a foundation for further study in one of three tracks. This platform offers a strong and cohesive knowledge base of the basic principles and approaches of organizational theory, economics, engineering and technological innovation, and entrepreneurship and management. The curriculum also offers students several choices to learn statistical analysis, while requiring mastery of appropriate levels of mathematics. Building on this multidisciplinary base, students then focus their course of study on one of the following tracks:

1. business economics,
2. organizational studies, or
3. entrepreneurship and technology management.

Upon completion of all concentration requirements, students receive the Bachelor of Arts (A.B.) degree in Commerce, Organizations and Entrepreneurship.

*The Curriculum*

**Foundation Courses**

All students are required to complete two courses in Economics, two in Sociology, two in Engineering, a Math course, and a Statistics course which together form the foundation of the COE concentration. To see specifically what foundation courses are required based on the track you intend to follow, please refer to the following table:

**Business Economics**

- ECON 0110 Principles of Economics
- ECON 1110 Intermediate Microeconomics
- SOC 1030 Organizational Theories of Public and Private Sectors
- SOC 1090 Theories of Organizational Dynamics and Decision Making
- ENGN 0020, or
- ENGN 0030 Transforming Society - Technology and Choices for the Future, or Introduction to Engineering
- ENGN 1010 The Entrepreneurial Process: Innovation in Practice

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
In addition to the COE Foundation courses, students must complete each of the following:

- ECON 0710 Financial Accounting
- ECON 1210 Intermediate Macroeconomics
- ECON 1710 Investments I
- ECON 1720 Corporate Finance

Three additional courses from the following list:

- ECON 1160 Managerial Economics
- ECON 1310 Labor Economics
- ECON 1390 Introduction to Research Methods in Economics
- ECON 1440 Economic Theories of Firms
- ECON 1450 Economics of Regulation
- ECON 1460 Industrial Organization
- ECON 1470 Bargaining Theory and Applications
- ECON 1480 Public Economics
- ECON 1500 Current Global Macroeconomic Challenges
- ECON 1510 Economic Development
- ECON 1520 The Economic Analysis of Institutions
- ECON 1540 International Trade
- ECON 1550 International Finance
- ECON 1560 Economic Growth
- ECON 1590 The Economy of China since 1949
- ECON 1600 Economics of the Middle East
- ECON 1630 Econometrics I
- ECON 1750 Investments II
- ECON 1759 Data, Statistics, Finance

- ECON 1760 Financial Institutions
- ECON 1770 Fixed Income Securities
- ECON 1780 Corporate Strategy
- ECON 1790 Corporate Governance and Management
- ECON 1800 Politics and Finance
- ECON 1810 Economics and Psychology
- ECON 1850 Theory of Economic Growth
- ECON 1870 Game Theory and Applications to Economics

2. Organizational Studies Track

In addition to the COE Foundation courses, students must complete the following:

I. Research Methods in Organizational Studies (2 courses):

A. One introduction to Research Methods, from the following list:

- SOC 1050 Methods of Research in Organizations
- SOC 1020 Methods of Social Research

Note: These courses introduce the fundamentals of rigorous research design. Substitutions generally will not be allowed. Because SOC 1050 focuses explicitly on organizational research topics, students should take it, if it is offered; however, if SOC 1050 is unavailable, SOC 1020 provides a suitable (and equally rigorous) alternative.

B. One Advanced Research Methods course, from the following list:

- SOC 1120 Sample Surveys in Social Research
- SOC 1260 Market Research in Public and Private Sectors
- SOC 1871F Principles and Methods of Geographic Information Systems
- SOC 2020 Multivariate Statistical Methods II
- SOC 2220 Advanced Quantitative Methods of Analysis
- SOC 2230‡ Techniques of Demographic Analysis
- SOC 2240 Event History Analysis
- SOC 2260E Structural Equations Models
- ANTH 1940 Ethnographic Research Methods
- CSCI 040 Introduction to Scientific Computing and Problem Solving
- ECON 1390 Research Methods for Economists
- ECON 1630 Econometrics I
- ECON 1759 Data, Statistics, Finance
- EDUC 1160 Evaluating the Impact of Social Programs
- PHP 1320 Survey Research in Health Care
- PPAI 1200 Policy Analysis and Program Evaluation

‡ indicates the 2000-level courses listed above that are designed for students with no prior training in the topic and can be taken with no additional requirements.

Note: These courses allow students to deepen and/or broaden their expertise in one or more methods of empirical inquiry. Substitutions may be proposed to the track advisor, provided that they are consistent with the objective of fostering a sophisticated understanding of the methodological tools for empirical study.

II. Additional Coursework in Organizational Studies (3 courses):

A. One Advanced Organization Studies course, from the following list:

- SOC 1060 Leadership in Organizations
SOC 1080 Groups in Organizations
SOC 1170 Corporations and Global Cities
SOC 1540 Human Needs and Social Services
SOC 1870A Investing in Social Change: The Practice of Philanthropy*
SOC 1870R* Groups in Organizations*
SOC 1871G* Social Goals, Motivation, and Behavior in Organizations*
SOC 1871M* Theories of the Third Sector and Civil Society*
SOC 1871O* Law, Innovations and Entrepreneurship*
SOC 2060* Complex Organizations and Health Policy*
SOC 2310* Health Institutions and Professions*
SOC 2960M* Organizational Sociology Graduate Seminar*
DEVL 1800A* The Ethnography of Corporations*
PPAI 1700V Nonprofit Organizations
PPAI 1700Y* Crisis Management*
PPAI 2170 Leadership and Organization
PPAI 2550* Managing and Leading in Public Affairs*
URBN 1870B* Business Networks in Asia*

Note: These courses directly employ and extend the theories and perspectives introduced by the foundational Organization 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. Substitutions generally will not be allowed.

B. Two Organization-Relevant Electives, from the following list:

Any Advanced Research Methods course (listed above) Note: No single course can be counted simultaneously toward both the Organization-Relevant Elective and the Advanced Research Methods requirements.

Any Advanced Organization Studies course (listed above) Note: No single course can be counted simultaneously toward both the Organization-Relevant Elective and the Advanced Organization Studies requirements.

SOC 1070 Money and Society: An Introduction to Economic Sociology
SOC 1114 Law and Society
SOC 1871C* Sociology of the Legal Profession
SOC 2200* Social Capital and Social Networks*
AMCV 1610A American Advertising: History and Consequences
CGS 0070 Language, Truth and Advertising
EDUC 1020 History of American Education
EDUC 1040 Sociology of Education
EDUC 1150* Education, the Economy, and School Reform*
EDUC 1200 History of American School Reform
EDUC 1210 Public Education and People of Color in U.S. History
EDUC 1640 Public Schools and Politics
EDUC 1650 Policy Implementation in Education
EDUC 1730 American Higher Education in Historical Context
EDUC 1760 Education and Public Policy
ENGN 1930G/1930H Entrepreneurship I and II – Capstone Project
ENGN 1930Q* Social Entrepreneurship*
ENGN 1930S* Land Use and Built Environment: An Entrepreneurial View*
ENGN 1930V* Engineers of the Future: Architects of Dreams*
ENGN 1930X Entrepreneurship and New Ventures: A Socratic Approach to Innovation Analysis and Application
ETHN 1890C* Business, Culture, and Globalization: An Ethnographic Perspective*
PHP 2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
POLS 1240 Politics, Markets, and States in Developing Countries
POLS 1820W* Capitalism and Political Theory*
PPAI 1520* Law and Economic Development: Theory, Policy, and Institutions*
PPAI 1700B* Social Welfare Policy in the United States*
PPAI 1700K* Health Policy Challenges*
PPAI 1700N* Legal Policy Challenges*
PPAI 1700R* Urban Revitalization: Lessons from the Providence Plan*

Note: These 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. Substitutions may be proposed to the track advisor, provided that they are consistent with the objective of fostering a well-rounded liberal arts understanding of organizations-in-context.

III. Integrative Senior Experience (1 course, selected from the options below):  

Senior Honors thesis The Integrative Senior Experience requirement can be satisfied by successful completion of a senior honors thesis on an Organization Studies topic, with an advisor or thesis reader drawn from the COE faculty. A thesis that fails to qualify for honors may nonetheless satisfy the Integrative Senior Experience requirement, provided that the student receives a passing grade from the thesis advisor and the COE committee member certifies that the student made a sincere and sustained effort to integrate Organization Studies themes into the project.

COE capstone coursework The Integrative Senior Experience requirement can be satisfied by the successful completion of one of either of the following designated "capstone" sequences with the COE program:

- SOC 1930/1940 (Social Entrepreneurship Capstone I and II)
- ENGN 1930G/1930H (Entrepreneurship I and II)

Note: Both capstone opportunities listed above are two-course sequences, with both semesters being needed to fulfill the Integrative Senior Experience requirement.

Senior-year seminar The Integrative Senior Experience requirement can be satisfied by the successful completion of an advanced (senior-or graduate-level) seminar, meeting the following criteria:

The seminar must be taken during the senior year and must either:

- come from the "Advanced Organizations Studies" list above;
- or-

- come from the "Organization-Relevant Elective" list, above and result in a term paper on an "organization studies" topic. Students wishing to avail themselves of this option must obtain prior approval of their topic proposal from both the course instructor and the Organization track advisor, and must file a copy of both the topic proposal and the final paper with the Organization Studies track advisor at the end of the semester.

To be a "seminar," a course should meet the following criteria:

1. Limited enrollment: Seminars generally have 30 or fewer students.
2. Discussion format: Instruction in seminar generally takes the form of faculty-led discussion, rather than lecture.
3. Term paper: Seminars generally require a substantial scholarly paper (or equivalent project) at the end of the term.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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Courses meeting these seminar criteria from the Advanced Organizations Studies and the Organization-Relevant Elective lists are noted above with an (*).

Note: (1) The Integrative Senior Experience is intended to provide students with an opportunity to synthesize and solidify knowledge and skills accumulated over the course of the Organization Studies program. This requirement must therefore ordinarily be undertaken during the senior year.

(2) No single course can be counted simultaneously towards both the Advanced Organizational Studies or Organization-Relevant Elective, and the Integrative Senior Experience.

3. Entrepreneurship and Technology Management Track

In addition to the Foundation courses, students must complete the following (other choices may be possible, these would need to be discussed with and approved by the track advisor):

One technology gateway course, to be chosen from:

- ENGN 0410 Materials Science (for students interested in functional materials or nanotechnology)
- ENGN 0720 Thermodynamics (for students interested in energy and environmental topics)
- ENGN 0510 Electricity and Magnetism (for students interested in photonics and device technology)
- ENGN 0310 Mechanics of Solids and Structures (for students interested in machine design and instrumentation)
- CSCI 0150 Introduction to Algorithms and Data Structures (for students interested in information technology and computer engineering)
- BIOL 0200 Foundations of Living Systems (for students interested in biotechnology topics)

Students must also complete the following:

EN1930G/1930H - Entrepreneurship I and II - Capstone Project

and a five-course track in a Technology Management Specialization as approved by the COE advisor in Engineering.

Sample courses of interest to students pursuing typical tracks (5 required in each track, selected in consultation with the track advisor) are listed below. Remember—the list of available courses is always changing. Some courses have prerequisites that are not listed, but need to be considered in planning. Also remember, it is not possible to list all specialty tracks; those shown are only samples.

Biotechnology – Biomaterials

- ENGN 1490 Biomaterials
- ENGN 0410 Materials Science (presumes BIOL 0200 offered as the gateway course)
- BIOL 1120 Biomaterials
- BIOL 0170 Biotechnology in Medicine
- BIOL 1090 Polymer Science for Biomaterials
- ENGN 1930R Molecular and Cell Biology for Engineers
- ENGN 1400 Analytical Methods on Biomaterials

Biotechnology – Biochemistry

- ENGN 1110 Transport and Biotransport Processes
- CHEM 0350 Organic Chemistry I
- CHEM 0360 Organic Chemistry II
- CHEM 0400 Biophysical and Bioinorganic Chemistry
- BIOL 0280 Introductory Biochemistry
- CHEM 1230 Chemical Biology
- CHEM 1240 Biochemistry
- CHEM 1220 Computational Tools in Biochemistry and Chemical Biology

Nanotechnology

- ENGN 1930B Biophotonics
- ENGN 1490 Biomaterials
- CHEM 1700 Nanoscale Materials: Synthesis and Applications
- PHYS 0120 Adventures in Nanoworld (First year students only)
- CHEM 0500 Inorganic Chemistry
- CHEM 1060 Advanced Inorganic Chemistry

Information Technology and Computer Engineering

- ENGN 1740 Computer Aided Visualization and Design
- ENGN 1640 Design of Computing Systems
- ENGN 1630 Digital Electronics Systems Design
- ENGN 1650 Embedded Microprocessor Design
- ENGN 1930Z Robot Design
- CSCI 0160 Introduction to Algorithms and Data Structures
- CSCI 0320 Introduction to Software Engineering
- CSCI 0220 Introduction to Discrete Structures and Probability

Machine Design and Instrumentation

- ENGN 0520 Electric Circuits and Signals
- ENGN 0810 Fluid Mechanics
- ENGN 1230 Instrumentation Design
- ENGN 1370 Advanced Engineering Mechanics
- ENGN 0410 Materials Science (presumes ENGN 0310 offered as the gateway course)
- ENGN 0720 Thermodynamics (presumes ENGN 0310 offered as the gateway course)
- ENGN 1740 Thermodynamics (presumes ENGN 0310 offered as the gateway course)
- ENGN 1740 Computer Aided Visualization and Design
- ENGN 1760 Machine Design
- ENGN 1930M Industrial Design
- APMA 1930Z Robot Design

Energy and Environment

- ENGN 1130 Phase and Chemical Equilibria
- ENVS 0490 Environmental Science in a Changing World
- ENVS 0410 Environmental Stewardship
- ENVS 1400 Sustainable Design in the Built Environment
- ENGN 1930U Renewable Energy Technologies
- ENGN 1340 Water Supply and Wastewater Treatment
- CHEM 0080A First Year Seminar - Energy (First year students only)

Photonics and Device Technology

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public.P_Main).
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For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).

- ENGN 0520 Electric Circuits and Signals
- ENGN 1590 Introduction to Semiconductors and Semiconductor Electronics
- ENGN 1930B Biophotonics
- ENGN 1630 Digital Electronics System Design
- ENGN 1690 Photonics and Applications
- ENGN 1620 Analysis and Design of Electronic Circuits
- ENGN 1600 Design and Implementation of Very Large Scale Integrated Systems
- ENGN 1580 Communications Systems

Functional Materials

- ENGN 1480 Metallic Materials
- ENGN 1490 Biomaterials
- ENGN 1470 Structure and Properties of Non-Metallic Materials
- ENGN 1420 Kinetic Processes in Materials Science and Engineering
- ENGN 1410 Physical Chemistry of Solids
- BIOL 1120 Biomaterials
- BIOL 1090 Polymer Science for Biomaterials

Community Health

Community Health is an interdisciplinary concentration that examines patterns of and explanations for, population health and disease; health policy; cross-cultural and international aspects of health; the organizational and social structures through which health services are delivered/received; and the public health system. Courses in the concentration demonstrate the ways in which the social, political, behavioral and biological sciences contribute to the understanding of national and international health care systems, resource allocation, and patterns of population distributions of health and disease. The concentration 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.

This concentration is relevant for students with career interests in public health; disease prevention and health promotion; health policy and epidemiology; clinical health care delivery; health care administration; international health, and health law.

Required Courses. There are four required courses: PHP 0310, 0320, 1320, 1910.

Electives. The concentration requires eight elective courses.

A. One from each of the following areas:

1. Environmental Health
2. U.S. Health Care Organization and Policy
3. International Health
4. Social and Behavioral Science for Prevention
5. Human Biology/Physiology
6. Statistics

B. Two approved courses in the university that are health-related.

Honors. An Honors track is available. Honors track students are also required to enroll in PHP 1970 in both semesters of their senior year to write the honors thesis.

Note:

- A 5-year AB/MPH option is available, with the MPH accredited by the Council for Education on Public Health.

Comparative Literature

Comparative Literature differs from other literature concentrations largely through its international focus and broad-gauged view of art and culture in which the study of languages is combined with the analysis of literature and literary theory. The undergraduate programs for concentration in Comparative Literature enable students to study literature in cross-cultural perspectives.

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).
- Comparative Literature 1210, Introduction to the Theory of Literature.
- TEN advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:

1. 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.
2. ONE COURSE chiefly devoted to EACH OF the three major literary genres: poetry, drama and narrative.
3. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
   a) Antiquity
   b) Middles Ages
   c) Renaissance/Early Modern
   d) Enlightenment
   e) Modern

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).
- Complete the same requirement for your third language before Semester VII.
- Comparative Literature 1210, Introduction to the Theory of Literature.
- TEN advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:

1. 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.
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2. ONE COURSE chiefly devoted to EACH of the three major literary genres: poetry, drama and narrative.
3. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
   a) Antiquity
   b) Middles Ages
   c) Renaissance/Early Modern
   d) Enlightenment
   e) Modern

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).
- Comparative Literature 1210, Introduction to the Theory of Literature.
- Comparative Literature 1710 (Comparative Literature 2720 strongly urged).
- ONE or MORE courses in Linguistics, drawn from among these courses: Cognitive, Linguistic and Psychological Sciences 0030 (formerly Cognitive Science 0410), Anthropology 0800, English 1210, Hispanic Studies 1210 or an acceptable substitute.
- FIVE or SIX advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:
  1. 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.
  2. ONE COURSE chiefly devoted to EACH of the three major literary genres: poetry, drama and narrative. 3.
  3. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
     a) Antiquity
     b) Middles Ages
     c) Renaissance/Early Modern
     d) Enlightenment
     e) Modern
  
  TWO workshops or MORE in Creative Writing

- A senior project to consist of:
  1. A substantial work in translation (length will vary depending upon language and genre);
  2. 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.

For additional information, please visit the Comparative Literature website (http://www.brown.edu/Departments/Comparative_Literature/).

Computational Biology

Standard program for the Sc.B. degree

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. Our program educates the student liberally in these fields, building on a foundation of coursework that may then focus via several possible tracks. The program offers four possible tracks: computational genomics, biological sciences, molecular modeling and applied mathematics and statistical genomics. The program requires a senior capstone experience that pairs students and faculty in creative research collaborations. Computational Biology graduates are candidates for competitive positions in industry or for training in academic science.

Prerequisites:

- MATH 0100 (Introductory Calculus II) or MATH 0170 (Advanced Placement Calculus)
- BIOL 0200 (The Foundation of Living Systems)
- or equivalents

General Core Course Requirements:

- Chemistry:
  - CHEM 0330 (Equilibrium, Rate, Structure)
- Biology:
  - BIOL 0470 (Genetics) Prerequisite BIOL 0200 or equivalent
  - and one of the following:
    - BIOL 0280 (Introduction to Biochemistry)
    - BIOL 0500 (Molecular Cell Biology)
- Computer Science:
  - CSCI 0150 (Intro to Object-Oriented Programming & Computer Science) No Prerequisite
  - CSCI 0160 (Algorithms and Data Structures) Prerequisite CSCI 0150
  - or
  - CSCI 0170 (Computer Science: An Integrated Introduction Part I) No Prerequisite
  - CSCI 0180 (Computer Science: An Integrated Introduction Part II) Prerequisite CSCI 0170
  - or
  - CSCI 0190 (Programming with Data Structures and Algorithms)
  - All students must take:
    - CSCI 0220 (Introduction to Discrete Structures and Probability) No Prerequisite
- Probability and Statistics:
  - APMA 1650 (Statistical Inference I)

Computational Biology Core Course Requirements:

- CSCI 1810 (Computational Molecular Biology) Prerequisites: (CSCI 0160, or 0180, or 0190) and CSCI 0220 (Introduction to Discrete Structures and Probability)
- APMA 1080 (Statistical Inference in Molecular Biology and Genomics)

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. A minimum of one semester of independent study is required (such as BIOL 1950 or CSCI 1970), although many students may conduct a full year of independent study.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Honors:

To be a candidate for honors, a student must have a course record judged to be excellent by the concentration advisor and must complete a thesis judged to be outstanding by the faculty member supervising the work.

Tracks:

Students must complete six courses in one of the following four tracks, as specified below:

**Computational Genomics Track:**

This track is designed for students whose interests lie in the development of algorithms and high-quality software (tools and systems) for biological applications.

- Three of the following:
  - CSCI 1230 (Introduction to Computer Graphics)
  - CSCI 1270 (Database Management Systems)
  - CSCI 1410 (Introduction to 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 0310 (Introduction to Computer Systems)
  - CSCI 0320 (Introduction to Software Engineering)
  - CSCI 1950L (Algorithmic Foundations of Computational Biology)
  - PHP 2620 (Statistical Methods in Bioinformatics)
  - APMA 1660 (Statistical Inference II)
  - BIOL 1430 (Computational Theory of Molecular Evolution)

**Biological Sciences Track:**

This track is designed for students whose interests lean more towards biological questions.

- At least four courses comprising a coherent theme in one of the following areas:
  1. Biochemistry
  2. Ecology
  3. Evolution
  4. Neurobiology

1. Two courses from the following:
2. CSCI 1950L (Algorithmic Foundations of Computational Biology)
3. PHP 2620 (Statistical Methods in Bioinformatics)
4. APMA 1660 (Statistical Inference II)
5. BIOL 1430 (Computational Theory of Molecular Evolution)

**Molecular Modeling Track:**

This track is designed for students who wish to gain competence in the field of molecular modeling and drug design.

- CHEM 1560A (Molecular Modeling)
- At least three courses from the following:
  - CHEM 1150 (Thermodynamics and Statistical Mechanics)
  - CHEM 1230 (Bioorganic Chemistry), CHEM 1240 (Biochemistry), or BIOL 1270 (Advanced Biochemistry)
  - BIOL 0530 (Immunology)
  - BIOL 1260 (Physiological Pharmacology)
  - BIOL 1540 (Molecular Genetics)
- Two courses from the following:
  - CSCI 1950L (Algorithmic Foundations of Computational Biology)
  - PHP 2620 (Statistical Methods in Bioinformatics)
  - APMA 1660 (Statistical Inference II)
  - BIOL 1430 (Computational Theory of Molecular Evolution)

**Applied Mathematics and Statistical Genomics Track:**

This track is designed for students whose interest focuses on extracting information from genomic and molecular biology data, and modeling the dynamics of these systems. Substitution of more advanced courses with consent of advisor is permitted.

- At least three courses from the following:
  - APMA 1660 (Statistical Inference II)
  - APMA 1690 (Computational Probability and Statistics)
  - CSCI 1410 (Introduction to Artificial Intelligence)
  - APMA 0340 (Methods of Applied Mathematics I) (or APMA 0330)
  - APMA 0360 (Methods of Applied Mathematics II) (or APMA 0350)
- At least three of the following:
  - BIOL 1430 (Computational Theory of Molecular Evolution)
  - CSCI 1950L (Algorithmic Foundations of Computational Biology)
  - PHP 2620 (Statistical Methods in Bioinformatics)
  - APMA 1070 (Quantitative Models in Biological Systems)

**Computer Science**

**Requirements for the Sc.B. degree.**

**Prerequisites: (2–3 courses)**

- Math
  - An approved math course (any MATH course beyond 0090 except for 0420, or APMA 0330).
- Writing
  - A student must take at least one course that satisfies the [CS Department Writing Requirement](http://selfservice.brown.edu/menu).

**Concentration Requirements (17 courses):**

- Core – Computer Science
  - Six core courses are required:

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Prerequisites (4 or 5 courses):

- Math
- An approved math course (any MATH course beyond 0090 except for 420, or APMA 0330).

Writing

- A course that satisfies the CS Department Writing Requirement.

Concentration Requirements (9 courses):

Core – Computer Science

- One introductory sequence is required:
  - CSCI 0150 and CSCI 0160
  - (CSCI 0170 and CSCI 0180)
  - (CSCI 0190 and a 1000-level CS course)

- Three intermediate courses must be taken, of which one must be math-oriented and one must be systems-oriented:
  - CSCI 0220 (math)
  - CSCI 0310 (systems)
  - CSCI 0320 (systems)
  - CSCI 0510 (math)

Advanced Courses

- Four additional courses in computer science or related areas required. Three must be advanced courses (at the 1000-level or higher), the fourth may be either an intermediate-level course not used to satisfy a core requirement or an advanced course. These three courses must include a pair of courses forming a coherent theme. A list of pre-approved pairs may be found at the approved-pairs web page. 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.

Computer Science–Economics

Requirements for the Sc.B. degree.

Interested students may contact concentration advisors in either the Department of Computer Science or in the Department of Economics.

Prerequisites (4 or 5 courses):

- Math
- MATH (0090 and 0100), or 0170; 0520 or 0540;
- ECON 0110.

Writing

- A student must take at least one course that satisfies the CS Department Writing Requirement.

Required Courses (19 courses):

- Applied Mathematics: APMA 1650.
- Computer Science: CSCI 0150 and CSCI 0160, or CSCI 0170 and CSCI 0180, or CSCI 0190 and a 1000-level CS course of the student's choosing not used to fulfill any other requirement.
- CSCI 0220, 0310, 0320, and 0510.

One of the following tracks:

- (1) Analytical Track:
  - Two courses from the set: CSCI 1410, 1490, 1550, 1570, 1580, 1590, 1760, 1950F, APMA 1210, 1660, 1690. (Only one of the three APMA courses may be used.)

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Required Courses (14 courses):

- Department of Computer Science or in the Department of Economics.
- Interested students may contact concentration advisors in either the
- Requirements for the A.B. degree:

Interested students may contact concentration advisors in either the Department of Computer Science or in the Department of Economics.

Prerequisites (4 or 5 courses):

- Math
  - MATH 0090 and 0100, or the single course MATH 0170. MATH 0520 or 0540.
- ECON 0110.
- Writing
  - You must take at least one course that satisfies the CS Department Writing Requirement.

Required Courses (14 courses):

- Applied Mathematics: APMA 1650.
- Seven Computer Science courses are required, consisting of: CSCI 0150 and CSCI 0160, or CSCI 0170 and CSCI 0180, or CSCI 0190 and a 1000-level CS course not used to fulfill any other requirement; CSCI 0220, 0310, and 0510;
- And two courses from either of the following tracks:
  - (1) Analytical Track:
    - CSCI 1410, 1490, 1550, 1570, 1580, 1590, 1760, and one of APMA 1210, 1660, and 1690 (only one of the three applied mathematics courses may be used);
  - (2) Information Systems Track:
    - CSCI 0320, 1230, 1260, 1270, 1290, 1380, 1430, 1480, 1580, 1660, 1670, 1680, 1730, and 1900.
- Six additional Economics courses are required: ECON 1110 or 1130, 1210, 1630, and three other 1000-level courses of which two must be chosen from the "mathematical-economics" group: ECON 1170, 1470, 1640, 1750, 1759, 1810, 1850, 1860, 1870.
- Note: only one of APMA 1210 and CSCI 1490 may be taken for concentration credit.

Development Studies

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Development studies is designed to provide a comparative perspective on the long-term social, political, and economic changes which have accompanied industrialization and the growth of the modern state in Africa, Asia and Latin America and the historical experience of European countries. Course selection should balance analytic training with local and historical knowledge. In the latter respect, at least two courses should focus on the developing world. Courses must be taken in at least three social science disciplines in order to have an interdisciplinary approach to these processes of change. All DS students are required to write a senior thesis, DEVL 1990.

Since study abroad is a potentially important part of the concentration, the possibility of spending part or all of the junior year in a developing world country should be discussed with concentration advisors and the Office of International Programs at the earliest possible time. Acquisition of relevant foreign language skills is also considered an important part of training in the study of development, although language courses cannot count for concentration.

All Development Studies concentrators are required to demonstrate competency in a foreign language to the 0600 level and to incorporate their language into the senior project.

Disciplinary courses deal with the theory and study of development within a given discipline. Students will take at least two of these by the end of the junior year, focusing on different developing regions. Substitutions must be approved by the Deputy Director.

The advanced seminar course related to development will focus on the developing world; if that is not possible, DS concentrators are encouraged to write course papers that make the link with development.

At least TWO of the elective courses on developing regions must focus specifically on regions in the developing world. A list of pre-approved electives will be provided.

All concentrators must produce a senior project. Students should enroll in DEVL 1990: Senior Thesis Preparation (with their primary advisor as their instructor) while working on their thesis. Group projects undertaken by up to three students can constitute a senior project but are not eligible for honors. The non-thesis senior research project can consist of a video or audio documentary, provided that documentary is based on an analytical framework and a background chapter. If the senior thesis contains a documentary, by the end of the junior year students are required to take one of the following courses: MCM 0100: Introduction to Modern Culture and Media, MCM 0710: An Introduction to Filmmaking, MCM 1700D: Reframing Documentary Production: Concepts and Questions, or MCM 0780: Soundtracks: Sound Production and Visual Media.

Other forms of non-thesis projects are subject to the approval of the Director. Approval should be obtained by the end of the first semester of the junior year. If a senior thesis requires the use of quantitative methods, students should take at least one course in statistics for social sciences in any of the following departments: economics, political science, or sociology, by the end of the junior year.

Early Cultures

The Program in Early Cultures allows the comparative study of the history, literatures, and religions of Mediterranean and South, East and West Asian antiquity (Rome, Greece, North Africa, Egypt, Anatolia, Mesopotamia, Israel, Iran, Arabia, India, China). Faculty from a variety of academic units (Anthropology, Classics, Comparative Literature, Egyptology, History, History of Art and Architecture, the Joukowsky Institute for Archaeology and the Ancient World, Judaic Studies, Philosophy, Religious Studies) offer courses relevant to Early Cultures. Concentration programs are formulated individually by each concentrator in consultation with the concentration advisor to focus on the study of two ancient cultures or to pursue a topic in several ancient civilizations. Examples of possible topics of research in this concentration include the following: cultural contacts between Greece and Egypt/West Asia; animal sacrifice in Greece and Israel; comparative legal studies: Israel, Hatti, and Mesopotamia; gender roles in Rome and Egypt; and Wisdom literature in Egypt, Israel, and Mesopotamia; the historiography of the exact sciences in India and Greece.
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Concentration patterns:

1. Ancient History (standard and honors)
2. Ancient Religions (standard and honors)
3. Languages and Literatures of Greece, Rome, North Africa, pre-Islamic West and South Asia (honors only)

General Requirements

Each nonhonors concentrator will choose to focus on either ancient history or ancient religions and will complete the Concentrators Seminar (ERLY 1000) in both the junior and the senior years, and eight other courses, four in each of two civilizations, or eight in a variety of civilizations.

Honors Requirements:

1. Ancient History or Ancient Religions (total of up to 12 courses)
2a. The Concentrators Seminar (ERLY 1000) in both the junior and senior years
2b. Two courses on the history or religions of two civilizations (four courses)
3. Languages and Literatures of Greece, Rome, North Africa, pre-Islamic West and South Asia (honors only)
4. Languages and Literatures of North Africa and pre-Islamic West, South, or East Asia (total of up to 12 courses)
5. Two 1000-level courses requiring knowledge of Greek or Latin; and two courses requiring knowledge of Egyptian, Hebrew, Aramaic, Akkadian, Sanskrit, or Phoenician (Four courses: two of each of two languages)
6. Two courses in the literature or culture associated with each of the two languages (For one of these languages, the two courses must be at the advanced level)
7. The honors thesis (one or two courses)

East Asian Studies

Concentration requirements for Class of 2012, only.

The educational and intellectual objectives of the Concentration Program in East Asian Studies are to encourage the concentrator (1) to develop a multi-disciplinary perspective to the study of East Asia, (2) to attain basic proficiency in one of the major East Asian languages, and (3) to study in some depth aspects of East Asian culture and society. The concentration serves students with two types of professional and academic interests: those who wish to pursue professional careers related to the East Asian region, and those who will continue their education at the graduate level in the humanities or social sciences with special emphasis on China or Japan.

The current course offerings, teaching faculty and library resources available on campus suggest two basic “tracks” of concentration in East Asian Studies: the “China track” and the “Japan track.” Students who elect to invest time and effort in learning the Chinese language should structure their programs of study focusing on subjects related to China, and conversely, those who choose to learn the Japanese language should specialize in topics related to Japan.

In formulating a study program, the concentrator should take the following guidelines into consideration:

1. This multi-disciplinary concentration is designed to serve students wishing to attain reasonable fluency in Chinese or Japanese and specialized familiarity with selected East Asian subjects.

Requirements that constitute a concentration program are:

- Chinese or Japanese through level 0600, or their equivalent. (Language courses are a prerequisite and do not receive concentration credit.)
- History 0410 - History 0420
- 4 EAS Electives: Electives in East Asia can be chosen from various disciplines (including, as offered, Anthropology, Comparative Literature, Economics, History, History of Art and Architecture, Political Science, Religious Studies, Sociology, and languages above the 0600 level). These courses should be relatively advanced in the discipline/area on which the student is primarily focused.
- 1 EAS Elective: This course shall focus exclusively on an East Asian culture outside of the student’s area of concentration (China, Japan or Korea).
- Senior Project: All concentrators are expected to complete a Senior Project, intended to be the culminating experience of their work in the concentration.

All concentrators must notify their Concentration Advisor of their plans for the Senior Project, and obtain the written approval of both the advisor and the instructor involved on the appropriate form, which is available on the departmental website. This form must be completed no later than the end of the registration period immediately prior to the semester in the senior year when the course will be undertaken. This project may take one of three forms:

1. Capstone Course: The student will select this course from among the courses offered in the East Asian Studies concentration at the 1000-level or above that will constitute a part of his/her program of study in the Senior year. The permission of the instructor must be obtained before a student may designate a course as his/her capstone course. In the

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
This multidisciplinary concentration is designed to serve undergraduate students wishing to attain reasonable fluency 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 either Chinese or Japanese (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. Because the Department normally only offers the first two years of Korean, students wishing advanced instruction in that language would normally do so as part of a study abroad program. 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.

Concentration advisors will guide and supervise in the planning of individual concentrations to ensure the development of coherent programs of study.

1. Independent Research Course: This is a one-semester independent research and writing course (EAST 1990) designed in consultation with the instructor, who may be any member of the East Asian Studies faculty willing to sponsor and guide the project. Written permission of the instructor must be obtained before a student will be allowed to register for EAST 1990.

2. Honors Thesis: Candidacy for Honors requires that, in addition to the seven regular courses, students must complete, with distinction, East Asian Studies 1930-1940 in their Senior year. Admission to the Honors Program requires that the student receive prior written permission of the instructor who will sponsor and guide the research for and writing of the Honors thesis, and of the Concentration Advisor. Forms for this purpose may be obtained from the departmental website, and must ordinarily be filed no later than the end of the registration period preceding the student’s seventh semester.

Concentrators’ academic experiences should culminate in their senior project. Concentration advisors will guide and supervise in the planning of individual concentrations to ensure the development of coherent programs of study.

For the purposes of the concentration, language courses through the third-year are treated as an accompanying requirement.

Required Introductory Surveys: All concentrators are required to complete successfully both History 0410 “Introduction to East Asian Civilization: China” and History 0420 “Introduction to East Asian Civilization: Japan.” Both courses are offered annually by the History Department; History 0410 in the fall, and History 0420 in the spring. These courses offer chronologically broad surveys of Chinese and Japanese history. They are required for concentrators in order to provide them with common frameworks for thinking about historical change in East Asia, and to raise an awareness of issues and developments outside of their particular geographical or temporal areas of focus. Department faculty are also aware that many undergraduates come to Brown with backgrounds in “Western Civilization” and North American history, but little if any exposure to the histories and cultures of East Asia, and believe that these courses play an important role in addressing those deficits. We encourage students to take these introductory courses early in their careers at Brown.

Content/Topics Courses: The revised concentration requires seven courses in addition to History 0410 and 0420. At least one elective must fall outside the primary focus of the concentrator’s course of study, which may be defined in linguistic, chronological, thematic or cultural terms. One of the seven electives may, with the consent of the concentration advisor, be a course topicaly unrelated to East Asia, but beneficial to the student’s disciplinary and/or theoretical interests.

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 Archeology, Anthropology, Economics, International Relations, and others.

Advanced Seminars: At least one of the seven elective courses must be an advanced research seminar, typically taken in the junior or 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 but are not limited to the East Asian Studies 1950 series and History 1970 series. 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 Undergraduate Advisor at the start of the semester.
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.

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.

Economics

Economics is the study of the way individuals, businesses, and governments choose to allocate resources to best satisfy their objectives. The study of economics serves a number of purposes: it helps students understand the functioning of markets, of firms, and of financial organizations; it helps students understand public debate about economic policy, including taxation and government expenditure, trade and globalization, health and welfare; it prepares students for graduate study in fields like business and law; and it prepares students for graduate study leading to teaching and research in economics; and it serves as a direct steppingstone towards employment in business, finance, non-profit, and government organizations.

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 1110), 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 alternative 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 economics department offers many of the required courses in an interdepartmental concentration called Commerce, Organizations, and Entrepreneurship (COE). COE is jointly run by the departments of economics and sociology, and the division of engineering. COE has three possible "tracks," one of which, the business economics track, is similar to a business economics concentration that was offered by our department until the early 2000s. Please contact the COE administrator for more details, including information about advising in that concentration.

Standard Economics Concentration

- Language study through the level of 0600 or the equivalent of Chinese, Japanese, or Korean (normally as part of a study abroad program)
- History 0410 Introduction to East Asian Civilizations: China
- History 0420 Introduction to East Asian Civilizations: Japan
- Seven elective courses
- At least one of the seven must be an advanced seminar
- At least one of the seven must fall outside the primary focus of the concentrator's course of study
- East 1930-1940 (Senior Thesis seminar) for Honors candidates only

Economics Course Requirements:

ECON 0110. ECON 1110 or 1130, 1210, 1620 or 1630, and at least five other 1000-level Economics courses. The total number of required economics courses. In sum, you must complete 10 courses, 1 in mathematics and 9 in economics.

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.

Education (Undergraduate Teacher Education Program)

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, EDUC 1450, EDUC 1070, EDUC 1080, EDUC 2060, EDUC 2090, and an education elective.

Education Studies

The Education Department focuses its scholarship and teaching on human learning and development, the history of education, the organization and reform of formal education, and education policy. The Education Studies concentration is designed for students who seek a broad liberal arts background in the field and asks them to select one of two tracks, Human Development or History/Policy. Human Development examines how children and adolescents change over time and how their learning changes, too. History/Policy examines formal education as it evolves within institutions and society, and the implications and consequences of institutional and policy changes.

Education Studies concentrators design a program that includes ten courses, of which at least eight are taken in the Education Department at Brown University. Within Education Studies, concentrators choose one of the two tracks, each designed to enable students to develop critical and creative skills for addressing issues surrounding children, schools, and education.

Course Requirements:

A. EDUC 1100 Introduction to Qualitative Research Methods or EDUC 1110 Introductory Statistics for Education Research and Policy Analysis

B. At least five Education courses in the chosen area of emphasis

C. At least two Education courses outside the chosen area of emphasis

D. Two additional, related courses

Honors

Concentrators seeking to graduate with honors must meet all requirements for the concentration, including a grade-point average established by the Department, and state their plans in writing by the end of their sixth semester. Finally, they must successfully complete EDUC 1990-1991 (Research and Writing in Education) in which they write a 60–70 page thesis under the guidance of a thesis advisor.

Egyptology and Ancient Western Asian Studies

The Department of Egyptology and Ancient Western Asian Studies offers a concentration for undergraduates who wish to pursue the bachelor of arts degree (A.B.). The concentration offers the students a choice of two tracks: Ancient Western Asian Studies or Egyptology.

Ancient Western Asian Studies Track

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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.

Courses

The undergraduate concentration in Ancient Western Asian Studies (AWAS) requires a total of at least ten (10) courses that are determined in the following way:

I. Introductory Courses (3 courses)

All AWAS concentrators are required to take the following three courses:

- AWAS 0800 Introduction to the Ancient Near East or ARCH 0370 Archaeology of Mesopotamia or ARCH 1600 Archaeologies of the Near East
- AWAS 0200 Introduction to Akkadian
- AWAS 0210 Intermediate Akkadian

II. Foundational Courses (3 courses)

At least one course is required from each of the following three areas:

1. History and Culture of Ancient Western Asia

Possible offerings include but are not limited to:

- AWAS 1100 Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia (WRIT)
- AWAS 2310B Assyriology I (WRIT)
- AWAS 2310C Assyriology II (WRIT)
- AWAS 1500 Ancient Babylonian Magic and Medicine
- AWAS 2600 Topics in Cuneiform Studies
- Gilgamesh and the Quest for Immortality (new course)

2. Ancient Scholarship in Western Asia

Possible offerings include but are not limited to:

- AWAS 1570 The Ancient World (WRIT)
- AWAS 1750 Divination in Ancient Mesopotamia (WRIT)
- AWAS 1650 Time in the Ancient World (WRIT)
- AWAS 1700 Astronomy, Divination and Politics in the Ancient World (WRIT)
- AWAS 1750 Divination in Ancient Mesopotamia (WRIT)
- AWAS 2310A Ancient Scientific Texts: Akkadian
- Scribes and Scholarship in the Ancient Near East (new course)

3. Archaeology of Ancient Western Asia

Possible offerings include but are not limited to:

- AWAS 1600 Astronomy Before the Telescope
- AWAS 1650 Time in the Ancient World (WRIT)
- AWAS 1700 Astronomy, Divination and Politics in the Ancient World (WRIT)
- AWAS 1750 Divination in Ancient Mesopotamia (WRIT)
- AWAS 2310A Ancient Scientific Texts: Akkadian
- Scribes and Scholarship in the Ancient Near East (new course)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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**

It is possible for students to receive the A.B. in Ancient Western Asian Studies with departmental honors. To do so students will need to write a senior honors thesis according to the criteria and procedure outlined below.

**Eligibility**

At the beginning of the second semester of the junior year, the student should begin thinking about potential topics and consult with the department's concentration advisor. Students seeking to graduate with honors will have received strong grades in concentration courses. In practice this means a preponderance of grades of 'A' in concentration courses. Students who are considering graduating with honors are strongly encouraged to take concentration courses for a letter grade. If the concentration advisor agrees that a senior honors thesis may be undertaken, the student must obtain (1) the agreement of two faculty members (at least one from the department) to serve as readers as well as (2) the approval of the department chair. If all parties agree that an honors thesis may be undertaken, the student must submit a working bibliography to the potential readers by the end of the semester (due 5/15).

**Procedure**

1. In the first semester of the senior year, the student will register for Individual Study Project in Ancient Western Asian Studies (AWAS). Note that this course is in addition to the ten courses required for the concentration. The student will submit a working title and outline, as well as a one-page abstract of the intended project by the end of the first month of the semester (due 9/30). The student will then work with the readers to prepare a detailed outline of the thesis with accompanying bibliography. Both readers must approve the thesis plan, and the student must then submit a partial draft (at least one major section) before the end of the Fall semester (due 12/15).

2. In the second semester of the senior year, the student will register for Individual Study Project in Ancient Western Asian Studies (AWAS). Note that this course is in addition to the ten courses required for the concentration. This stage will normally involve meetings with the first reader twice a month, and with the second reader monthly, to discuss the on-going research and writing of the thesis.

3. A complete draft of the thesis must be submitted to the honors committee by 3/15. As a rule of thumb, the thesis should be not more than 100 pages in length, including bibliography.

4. Three bound copies of the final version of the honors thesis must be deposited by 4/15.

5. During a half-hour session during the final exam period, the student will give a capstone presentation defending the thesis in front of the thesis committee as well as any other faculty and students who wish to attend.

**Egyptology Track**

The undergraduate concentration in Egyptology 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.

I. Introductory Courses (6 courses)

- EGYT 1310-1320 Middle Egyptian I-II
- EGYT 1430-1440 Ancient Egyptian History I-II
- ARCH 0150 Archaeology of Ancient Egypt
- EGYT 1420 Ancient Egyptian Religion and Magic or ARCH 1625 Temples and Tombs

II. In-Depth Courses (2 courses)

- EGYT 1420 Ancient Egyptian Religion and Magic or ARCH 1625 Temples and Tombs
- EGYT 1400-1410 Ancient Egyptian History I-II
- ARCH 0150 Archaeology of Ancient Egypt

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
All concentrators in Egyptology 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 honors thesis, the student will register for Individual Study Project in Egyptology. Note that this course is in addition to the ten courses required for the concentration. The student will submit a working title and outline, as well as a one-page abstract of the intended project by the end of the first month of the semester (due 9/30). The student will then work with the readers to prepare a detailed outline of the thesis with accompanying bibliography. Both readers must approve the thesis plan, and the student must then submit a partial draft (at least one major section) before the end of the Fall semester (due 12/15).

2. In the second semester of the senior year, the student will register for Individual Study Project in Egyptology. Note that this course is in addition to the ten courses required for the concentration. This stage will normally involve meetings with the first reader twice a month, and with the second reader monthly, to discuss the on-going research and writing of the thesis.

3. A complete draft of the thesis must be submitted to the honors committee by 3/15. As a rule of thumb, the thesis should not be more than 100 pages in length, including bibliography.

4. Three bound copies of the final version of the honors thesis must be deposited by 4/15.

5. During a half-hour session during the final exam period, the student will give a capstone presentation defending the thesis in front of the thesis committee as well as any other faculty and students who wish to attend.

### Engineering

**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 Engineering 0030, and 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 so that the student specializes in one particular Engineering discipline, with careful attention to the pre-requisites of the 1000-level courses. Please note that not all engineering courses can be used to satisfy the engineering course requirement for the A.B. degree. For example, ENGN 0020, 0090, 0900, 0930 and 1010 cannot be used to satisfy the engineering course requirement for the A.B. degree. For this reason, it is essential that the set of courses must be developed through consultation with the concentration advisor. The program must also require preparation in Mathematics equivalent to Mathematics 0200 and Applied Mathematics 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 Chemistry 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 the Engineering AB concentration advisor and the Engineering Concentration Chair.

**Standard programs for the Sc.B. degree**

Standard programs for the Sc.B. degree include seven ABET-accredited degree programs: biomedical engineering, a stand-alone interdisciplinary concentration; and six different tracks in Engineering: chemical and biochemical, civil, computer, electrical, materials, and...
mechanical engineering. In addition, one interdisciplinary degree program, engineering and physics, is offered. These programs are described in detail in the booklet, Engineering Undergraduate Programs (available online at http://www.engin.brown.edu/undergrad/guide/index.html).

Students in all of the ABET-accredited degree programs, except Biomedical and Computer Engineering, are expected to successfully complete the seven (or eight) courses ENGN 0030, 0040, 0410, 0510, 0520, 0720, and either 0310 or 0810 (or both in the case of Civil and Mechanical Engineering). Also, they must complete successfully the six courses CHEM 0330, MATH 0190 and 0200 (or equivalent), APMA 0330 and 0340 (or equivalent), CSCI 0040 (or another computing course, subject to approval). Students choosing Chemical and Biochemical Engineering take BIOL 0200 (or higher) instead of CSCI 0040.

Students without one year of secondary school level preparation in calculus should take MATH 0090, 0100 in their first year. These students need to be familiar with multivariable calculus for ENGN 0510, which is often taken during the first semester of the sophomore year. Such students are urged to acquire the necessary math background through self-study, by taking a summer course, or by deferring ENGN 0510 until additional mathematics has been taken. In addition, all students must successfully complete a minimum of four courses in the humanities and/or social sciences. See the entry under 'Biomedical Engineering' and computer engineering for course requirements for these degree programs.

The program of each student must be approved by the Engineering Concentration Committee, which issues more detailed guidelines and program suggestions.

Chemical and Biochemical Track:

The concentration is composed of the following courses:

1. The common core program for the Sc.B. (excluding ENGN 0310 and CSCI 0040): ENGN 0030, 0040, 0410, 0510, 0520, 0720, 0810; CHEM 0330; MATH 0190 and 0200; APMA 0330 and 0340; and BIOL 0200.

2. An upper level, seven course sequence, including: ENGN 1110, 1120, 1130, 1140 and 1710; plus CHEM 0350; plus one additional elective chemistry course with a significant laboratory component beyond CHEM 0330 (e.g., CHEM 0360, 0400, 0500, 1170, etc.); and

3. One approved, upper level elective course in the natural sciences, to be selected from the four specific areas of chemistry, physics, life sciences, and materials science. For suggestions of acceptable courses, see the Concentration Advisor.

Civil Engineering Track:

The concentration is composed of the following courses:

1. The common core program for the Sc.B.: ENGN 0030, 0040, 0310, 0410, 0510, 0520, 0720, and 0810; CHEM 0330; MATH 0190 and 0200; APMA 0330 and 0340; CSCI 0040.

2. An advanced sciences course (e.g., GEOL 1580 or 1590).

- Students interested in Structures, must include the following: ENGN 1300, 1340, 1360, 1380, 1930C and 1930D (Civil Engineering Project; the latter two courses together count for one course credit), plus one additional course to be chosen from ENGN 1310, 1370, 1740, 1750, and 1860.

- Students interested in Environmental Problems and Planning, must include the following: ENGN 1130, 1300, 1310, 1340, 1360, 1930C and 1930D (Civil Engineering Project; the latter two courses together count for one course credit). Attention is called to the following courses as particularly relevant technical electives: ENGN 1110, 1380, 1710, 1740 and 1860.

Computer Engineering Track:

The 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.

There are four elements to the concentration:

1. Computer Engineering basic core (11): ENGN 0030, 0040, 0510, 0520; MATH 0190, 0200 (or 0170, 0180); APMA 0330 (or 0350), APMA 1650; one of CHEM 0330, BIOL 0200, ENGN 0720, or ENGN 0410; CSCI 0150, 0160 (or 0170, 0180), (or 0040, 0190).

2. Computer Engineering advanced core (4): MATH 0520 (or CSCI 1570), CSCI 0310; ENGN 1570, and 1630.

3. Computer Engineering specialties (5): a. Computer Specialty: ENGN 1620 and ENGN1640; one of ENGN 1580, 1600, 1650, 1680, 2910A, P, W; 2911C, G, X, Y, (or other ENGN courses, subject to approval); two of CSCI 0320, 1260, 1480, 1570, 1670, 1730, 1760, 1900, or other CS courses subject to approval of the Engineering Concentration Committee; b. Multimedia Signal Processing Specialty: APMA 1170; two of ENGN 1580, 1610, 2500, 2520, 2530, 2540, 2560, 2570, 2910X; one of CSCI 0320, 1230, 1410, 1430, 1570, 1900, or other CSCI courses subject to approval of the Engineering Concentration Committee; plus one more course from the above list.

4. Capstone Course / Independent Study: ENGN 1970/1971, an independent study relevant to the specialty selected by the student. For the Computer Systems Specialty, ENGN1650 may be used as the Capstone, but then cannot be counted for the ENGN choice above in 3a. The independent study project should provide students with exposure to current research topics. In order to assure satisfactory progress in their independent study, students enrolled will meet at least bi-weekly with their advisors and give two oral reports to the group during the semester. A final written report will also be required. In addition, students will meet as a group with faculty to share ideas and help nurture an environment of collaborative research.

Electrical Engineering Track:

The concentration is composed of the following courses:

1. The common core program for the Sc.B.: ENGN 0030, 0040, 0410, 0510, 0520, 0720, and 0810; CHEM 0330; MATH 0190 and 0200; APMA 0330 and 0340; CSCI 0040; and PHYS 0790 or any other 1000-level Physics course.

2. Seven more courses must included:

- Four of these must be: ENGN 1570, 1620, 1630, and ENGN 1000 or ENGN 1970 or 1971.
The principles underlying modern technology. Specifically, it gives those
providing students with an in-depth understanding of the fundamental
workings of science and technology, dealing with the philosophical, ethical, or political aspects of science and technology.

Materials Engineering Track:

The concentration is composed of the following courses:

1. The common core program for the Sc.B.: ENGN 0030, 0040, 0410, 0510, 0520, 0720, and 0310 or 0810; CHEM 0330; MATH 0190 and 0200; APMA 0330 and 0340; CSCI 0040; and PHYS 0790.

2. The student must take the following courses: ENGN 1410, 1420, 1440 and 1000 (or, with permission, ENGN 1970 or ENGN 1971, containing an equivalent design experience relevant to Materials Engineering).

3. At least three of the following four, upper level materials courses: ENGN 1450, 1470, 1480, and 1490. These courses are taken in either the junior or senior year.

Upper level courses recommended to satisfy requirements of a selected specialty area, Mechanical Properties and Mechanical Processing, Electrical Properties and Applications of Materials to Solid State Electronics, Chemistry and Materials Processing and Synthesis, or Biomaterials, may be found in the Engineering Undergraduate Programs booklet available online at http://www.engin.brown.edu/undergrad/guide/index.html.

Mechanical Engineering Track:

The concentration is composed of the following courses:

1. The common core program for the Sc.B.: ENGN 0030, 0040, 0410, 0510, 0520, 0720, and 0310 or 0810; CHEM 0330; MATH 0190 and 0200; APMA 0330 and 0340; an approved computer science course. (Students should consult the Engineering Undergraduate Programs booklet regarding specific details for each specialty area (available online at http://www.engin.brown.edu/undergrad/guide/index.html)).

2. Six upper level courses to satisfy requirements of a selected specialty area: Aerospace Applications, Biomechanics, Energy Conversion and Fluid and Thermal Systems, Engineering Mechanics, or Mechanical Systems: Dynamics, Materials and Design. (Students should consult the Engineering Undergraduate Programs booklet regarding specific details for each specialty area (available online at http://www.engin.brown.edu/undergrad/guide/index.html)).

Engineering and Physics

The Sc.B. degree program in Engineering-Physics, sponsored jointly by the Division of Engineering and the Department of Physics, provides students with an in-depth understanding of the fundamental principles underlying modern technology. Specifically, it gives those

who are interested in applied technical problems a strong background in physics and mathematics beyond that given in the standard engineering program. Students take a significant part of the usual engineering and physics programs, obtain substantial laboratory experience, and take several upper-level courses focusing on applied physics. The program allows students to take either the standard physics or engineering programs during their freshman and sophomore years and then switch to this combined program.

The total number of physical science courses required for the program is 19. (We assume that a student begins his or her mathematics courses at Brown with MATH 0170 or its equivalent. Students who begin in MATH 0200 or equivalent are encouraged but not required to take an additional upper-level mathematics course.)

The courses are as follows:

1. PHYS 0050, 0060; or PHYS 0070, 0160; or ENGN 0030, 0040.

2. MATH 0170, 0180 (or equivalently, MATH 0190, 0200) and three additional higher-level math or applied math, or mathematical physics (PHYS 0720) courses.

3. CSCI 0040 or higher-level programming course such as CSCI 0150.

4. PHYS 0470, 1510, or ENGN 0510, 1560.

5. PHYS 0500 or ENGN 1370.

6. PHYS 1410–1420.

7. PHYS 1530 or ENGN 0720.

8. ENGN 1620.

9. One course from the following: ENGN 0310, ENGN 0810, CHEM 0330, or a physics course on continuum mechanics.

10. One course from the following: ENGN 1690, ENGN 0410, PHYS 0560.

11. One course from the following: PHYS 1560, ENGN 1590, or an approved 2000-level engineering or physics course.

12. A thesis under the supervision of a physics faculty member (PHYS 1990) or engineering faculty member (ENGN 1970 or ENGN 1971).

In addition, students must take four courses in the humanities and social sciences. They are encouraged to consider taking courses dealing with the philosophical, ethical, or political aspects of science and technology.

To accommodate the diverse preparation of individual students, variations of the above sequences and their prerequisites are possible by permission of the appropriate concentration advisor and the instructors involved.

It is required 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 Division of Engineering.

English (Changes pending CCC approval)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
About the Concentration

Through the study of literature in English, concentrators develop skills in critical reading, thinking, and writing in preparation for a wide range of professions and careers including teaching, writing, publishing, media, medicine, law, and business. The concentration requirements aim to provide students with a coherent sense of the history of English literature from Anglo-Saxon times to the present. English concentrators have considerable latitude to choose the specific courses that will meet the requirements and we expect these choices to be informed by consistent consultation with a faculty advisor. Writing skills are an especially important focus of the English concentration. Through a variety of exercises from the short analytical essay to the longer research paper English concentrators are given a range of opportunities to sharpen their writing. 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 approved by a concentration advisor. To declare a concentration, students who have not previously filed a paper concentration form must fill out an online Concentration form via ASK, and the English Department’s Concentration Advising Plan (pdf). Students who declared their English Concentration in 2010-2011 or earlier may choose to fulfill the requirements for the previous version of the concentration (for details please see the English Department website).

Concentration Requirements (10 courses at the level of 0210 or above):

1. ENGL 0210; ENGL 0410; ENGL 0610
2. One course in addition to ENGL 0210 in Area I: Medieval and Early Modern Literatures and Cultures
3. One course in addition to ENGL 0410 in Area II: Enlightenment and the Rise of National Literatures and Cultures
4. One course in addition to ENGL 0610 in Area III: Modern and Contemporary Literatures and Cultures
5. One theory course
6. Three electives

* Five courses must be 1000-level courses.

*With advisor approval, two of the ten required courses may be taken in departments other than English.

*As many as two 1000-level courses dealing primarily with the practice of writing, rather than the interpretation of literature, may be counted as electives.

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.

Concentration in Literatures in English—Nonfiction Writing Track

The English concentration also includes a Nonfiction Writing Track. The requirements are the same as 1 through 5 above plus one English literature course emphasizing the genre of nonfiction writing and three 1000-level Nonfiction Writing courses for a total of eleven courses.

Honors in Literatures and Cultures in English

Requirements are the same as those for the regular concentration, with the following additions:

Honors candidates must complete at least three upper-level seminars or comparable small courses and complete ENGL 1991 and ENGL 1992. Honors candidates must also earn more A’s than B’s in courses taken as part of the English concentration (or receive the equivalent faculty evaluation on a Course Performance Report for courses taken S/NC). Candidates for Honors must have two letters of recommendation submitted to the Honors Advisor, a writing sample, and a one-page description of their proposed topic signed by the faculty member who has agreed to serve as the director of their thesis.

Honors in Nonfiction Writing

Requirements are the same as those for the Nonfiction Writing Track, with the following additions:

Honors candidates must complete at least three upper-level seminars, two of which must be 1000-level nonfiction writing seminars, and must successfully complete ENGL 1993 and ENGL 1994. Honors candidates must also earn more A’s than B’s in courses taken as part of the English concentration (or receive equivalent faculty evaluation in a Course Performance for courses taken S/NC). Candidates for Honors in Nonfiction Writing must have two letters of recommendation submitted to the Nonfiction Honors Advisor, a writing sample, and a one-page description of their proposed topic signed by the faculty member who has agreed to serve as the director of the thesis.

Honors in Creative Writing

This program is only open to students who matriculated in Spring 2005 or before. For students who began their studies at Brown in Fall 2005 or thereafter, this option is not available. Interested students should obtain information from the office of the Literary Arts Program.

Environmental Studies

Standard program for the A.B. degree in Environmental Studies.

Basic prerequisites: Competence in mathematics sufficient to take courses approved for the concentration

Core Requirements:

ENVS 0110 Humans, Nature, and the Environment: Addressing Environmental Change in the 21st Century, or an approved alternative****

3 intermediate level social science or humanities courses appropriate to the student’s focus ***, e.g.,

- ENVS 0510 International Environmental Policy
- ENVS 1350 Environmental Economics
- ENVS 1410 Environmental Law and Policy
- ENVS 1710 Environmental Health
- HIST 1790 North American Environmental History

2 intermediate level environmental science courses appropriate to the student’s focus ****, e.g.,

- ENVS 0490** Environmental Science in a Changing World
- BIOL 0420 Principles of Ecology
- GEOL 0220 Physical Processes in Geology

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Competence in statistics and/or qualitative methods based on the student's focus
ENVS 1920 Analysis and Resolution of Environmental Problems

**Focus: Four focus courses beyond the introductory level.**

**Thesis:** ENVS 1970/1971

TOTAL # COURSES: 8 Core + 4 Focus + 2 Thesis = 14 courses

**Standard program for the Sc.B. degree in Environmental Science**

**Basic Requirements:**

- Competence in mathematics (MATH 0090, MATH 0100) and chemistry (CHEM 0330)

**Core Requirements:**

- ENVS 0110 Humans, Nature, and the Environment: Addressing Environmental Change in the 21st Century, or an approved alternative****
- 2 intermediate level non-science courses appropriate to the student's focus ***, e.g.,
  - ENVS 0510 International Environmental Policy
  - ENVS 1350 Environmental Economics
  - ENVS 1410 Environmental Law and Policy
  - ENVS 1710 Environmental Health
  - HIST 1790 North American Environmental History
- 3 intermediate level environmental science courses appropriate to the student's focus ****, e.g.,
  - ENVS 0490 Environmental Science in a Changing World
  - BIOL 0420 Principles of Ecology
  - GEOL 0220 Physical Processes in Geology

Enrolment in statistics, e.g., PHP 2500, PHP 2501 (BC 203, BC 213)
ENVS 1920 Analysis and Resolution of Environmental Problems

**Focus: Six focus courses beyond the introductory level:**

- 5 of 6 must be science courses;
- 3 of 6 must be at the 1000-level;
- a t least one (1) course must have laboratory or field-based component.

**Thesis:** ENVS 1970/1971

TOTAL # COURSES: 3 Basic science + 8 Core + 6 Focus + 2 Thesis = 19 courses. (Advanced placement credit for MATH 0090 or MATH 0090 and MATH 0100 can be used to meet the math competency requirement and reduce the number of required courses).

* Alternatives to ENVS 0110 may include GEOL 0160B Global Environmental Change, ENVS 0070 Environment and Society, or a similar course from transferring institution depending on the student's situation. Substitution requires approval of the concentration advisor.

**A score of 5 on AP exam may be used to satisfy ENVS 0110, ENVS 0490, MATH 0090, or MATH 0100 with permission of the concentration advisor.

***Students are strongly encouraged to take Environmental Economics and an environmental policy course.

****Other intermediate level science courses may be substituted with the approval of the concentration advisor.

**Ethnic Studies**

Ethnic Studies is an interdisciplinary and comparative concentration that examines the construction of race and ethnicity in social, cultural, historical, political, and economic contexts. Concentrators are required to develop individual programs in consultation with faculty advisors. Each concentrator is required to study the history and experience of more than one group. The focus may be either a United States-based comparative analysis or a United States/international analysis. Each program is to be organized around a set of core courses that help students to identify a set of historical and theoretical questions to be investigated and provide the tools necessary to address those questions.

Each concentrator pursues work in either literature and arts, the humanities, or the social sciences, or some combination of these. The work is to be systematic and well-defined. A faculty advisor works closely with the student to ensure that the work is rigorous and intellectually sound. The primary advisors for ethnic studies concentrators are the members of the Ethnic Studies Executive Committee.

**Requirements**

The concentration requires ten courses:

1. ETHN 0500 (Introduction to Ethnic Studies);
2. Two of six core courses:
   a. AFRI 0090 or 0100 (An Introduction to Africana Studies)
   b. A section of AMCV 1610 as approved by the concentration advisor
   c. ANTH 1121 (American Indian Cultures)
   d. SOC 1270 (Race, Class and Ethnicity in the Modern World)
   e. ANTH 1400 (Race, Culture and Ethnic Politics) or ANTH 1420 (Ethnicity, Race and Gender in the Americas)
   f. ENGL 0610D (Introduction to Asian American Literature)
   g. Courses taught by core Ethnic Studies faculty may be recognized in consultation with concentration advisor.
3. Three approved courses in ethnic studies that address the student's focus area;
4. Three courses drawn from a list of related courses;
5. ETHN 1900 (Senior Seminar in Ethnic Studies) 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.
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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 the Center for the Study of Race and Ethnicity in America (401-863-3080).

French Studies

The Department of French Studies offers four standard concentration tracks. Please note that the following apply to the French Civilization, French Literature and French Language tracks:

1. French 600 or equivalent is a prerequisite.
2. The overall requirement is for a minimum of nine courses (ten for Honors).
3. Up to four courses taken abroad may count for concentration credit.
4. The senior seminar (FREN 1900) must be taken during the senior year.

I. French Civilization Track

The concentration in civilization enables students to develop a multifaceted understanding of French and Francophone cultures, histories and contemporary issues. While based in French Studies, the program is interdisciplinary, calling for the integration of elective courses in departments such as History, Africana Studies, History of Art, International Relations, Political Science, etc. A minimum of seven courses are to be taken in French Studies.

Required courses: one upper-level language course (FREN 1510 or 1610), FREN 0750, and FREN 1900.

Elective courses: six courses, including at least four in French Studies (numbered FREN 0760, FREN 1010 and higher; FREN 1410 is highly encouraged) and a maximum of two courses (1000-level or higher) in other departments. A list of extra-departmental electives is posted on the department's web site.

II. French Literature Track

The literature concentration provides a comprehensive view of French and Francophone literature and various types of literary analysis. Introductory courses acquaint students with methods of intellectual inquiry and basic critical approaches. Upper-level courses explore a particular author, literary genre, period, or special topic. Students learn how to use diverse analytical approaches, including semiotic, philosophical, psychological, feminist, and reader-oriented methods of criticism.

Required courses: one upper-level language course (FREN 1510 or 1610), FREN 0760, FREN 1000, and FREN 1900.

Elective courses: five courses numbered 0750, FREN 1010 and higher.

III. French Language Track

The concentration in language combines advanced linguistic proficiency with the study of language as a human phenomenon. It combines course work in French Studies with disciplines that analyze the functioning of language (Cognitive and Linguistic Sciences), use linguistic models to study other fields of human behavior (Anthropology), or provide other specialized insight (e.g., Comparative Literature, Philosophy, Modern Media and Communication).

Required courses: FREN 1510, FREN 1610 and FREN 1020 (History of the French Language); two other courses in French Studies (numbered FREN 0750 and higher); and one final independent study course to provide a synthesis of the knowledge acquired in various areas of study.

Elective courses: three 1000- or 2000-level courses in other departments. A list of extra-departmental electives is posted on the department's web site.

The Honors Program

Candidacy for honors in French Studies presupposes an outstanding academic record, particularly in the major field. Any of the programs may be expanded into an Honors Concentration with these differences: the student will take a minimum of ten courses and write an Honors Thesis. While normally taken only in the seventh semester, students may opt to re-enroll in FREN 1990 (Senior Thesis) during the last semester, in which case eleven courses are required.

Further information on French Concentration Tracks and the Honors Programs is available on the department's web site or from the Director of Undergraduate Studies.

Gender and Sexuality Studies

Gender and Sexuality Studies is an interdisciplinary concentration in which students examine the construction of gender and sexuality in social, cultural, political, economic, or scientific contexts. Each concentrator will focus on a well-defined topic or questions and work 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 might 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 if they wish. Introductory and methodology courses in the disciplines appropriate to the focus will help students understand the principles grounding such practices as historical research, literary interpretation, and sociological analysis.

Requirements:

The concentration requires 10 courses, 12 for honors concentrators.

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. A senior seminar which counts as your capstone course.
   Senior seminar participants are expected to write a research essay.

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 in their sixth semester. Honors concentrators fulfill the regular requirements, completing a two-semester thesis as their capstone project.

For more information, including current cross-listed courses and sample concentration plans, please consult the concentration webpage (www.pembrokecenter.org/IP_UndergraduateProgram.asp).

Geological Sciences

Standard program for the A.B. degree

This program provides a broad introduction to the geological sciences. Recommended for students seeking a liberal education and a general understanding of Earth processes and Earth history. Especially attractive for double concentrations, such as geology and economics as a career path to law or business, or geology and English as a career path to journalism or technical writing.

1. Four basic supporting science courses:
   a. CHEM 0330 (or advanced placement).
   b. Three of the following: mathematics: MATH 0090, 0100 or more advanced; physics: PHYS 0050, 0060 or more advanced; engineering: ENGN 0030, 0040 or more advanced; and biology: BIOL 0200 or more advanced.

2. Nine concentration courses:
   a. GEOL 0220, 0230, 0240.
   b. Two of GEOL 1410, 1420, 1450.
   c. Two of GEOL 0310, 1110, 1240, 1330 (or 1710), 1580, or a field course.
   d. Two additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geobiology and related fields.

1. Five basic supporting science courses:
   a. BIOL 0200 (or more advanced).
   b. CHEM 0330 (or advanced placement).
   c. PHYS 0050 or ENGN 0030, 0040 or more advanced.

2. Fourteen (14) concentration courses:
   a. GEOL 0220, 0230, 0240, 0310, 1240, 1410, 1420, 1450, and a field course.
   b. Four courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.
   c. GEOL 1970 (Senior Research Thesis).

Geology–Biology

Standard program for the A.B. degree

This program emphasizes interrelations between biological and geological processes including an understanding of the origin and development of life as interpreted from the geologic record, evolution of climate and environments, and dynamic processes in the stratigraphic record. Prepares students for work in environmental issues, geology, ecology, oceanography, or global change.

1. Four basic supporting science courses:
   a. BIOL 0200 (or more advanced).
   b. CHEM 0330 (or advanced placement).
   c. Two courses in mathematics and/or physics and/or engineering at the level of MATH 0090, 0100, PHYS 0050, 0060, or ENGN 0030, 0040; or more advanced.

2. Ten (10) concentration courses:
   a. GEOL 0220, 0230, 0240, 0310, 1240.
   b. Three Biology courses such as (but not limited to) BIOL 0410, 0420, 0430, 0470, 0480, 1420, 1430, 1880, and ENVS 1450.
   c. Two upper level geological sciences courses such as (but not limited to) GEOL 1100, 1110, 1120, 1130, 1330, 1350, 1370, 1380.

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geobiology and related fields.

1. Five basic supporting science courses:
   a. BIOL 0200 (or more advanced).
   b. CHEM 0330 (or advanced placement).
   c. PHYS 0050 or ENGN 0030, 0040 or more advanced.

2. Four courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.
   a. Two courses in mathematics at the level of MATH 0090, 0100, or more advanced.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
2. Fourteen (14) concentration courses:
   a. GEOL 0220, 0230, 0240, 0310, 1240.
   b. Three Biology courses such as (but not limited to) BIOL 0410, 0420, 0430, 0470, 0480, 1420, 1430, 1880, and ENVS 1450.
   c. Two upper level geological sciences courses such as (but not limited to) GEOL 1100, 1110, 1120, 1130, 1330, 1350, 1370, 1380.
   d. Three additional courses from upper level geological sciences, upper level mathematics, or supporting sciences with approval from the departmental concentration advisor.
   e. GEOL 1970 (Senior Research Thesis).

Geology–Chemistry

Standard program for the A.B. degree

This program emphasizes geochemical processes and phenomena on and within the Earth. 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.

1. Four basic supporting science courses:
   - Two courses in mathematics at the level of MATH 0090, 0100 or more advanced.
   - CHEM 0330.
   - PHYS 0050 or ENGN 0030, or a more advanced course (or advanced placement).
2. Ten (10) concentration courses:
   - GEOL 0220, 0230, 0240
   - Three additional chemistry courses
   - Two geology courses: either GEOL 1410 and GEOL 1420, or GEOL 1130 and GEOL 1370.

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geochemistry and related fields.

1. Five basic supporting science courses:
   - Two courses in mathematics at the level of MATH 0090, 0100 or more advanced.
   - CHEM 0330.
   - PHYS 0050, 0060 or ENGN 0030 or a more advanced course (or advanced placement).
2. Fifteen (15) concentration courses:
   - Either the geochemistry/inorganic option or the geochemistry/organic option. Geochemistry/inorganic option: GEOL 0220, 0230, 0240, 0310 or 1370, 1410, 1420, plus one from GEOL 1240, 1330 (or 1710), 1450; CHEM 0350, 0360 plus one additional chemistry course.
   - Four additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.
   - GEOL 1970 (Senior Research Thesis).

Geology–Physics/Mathematics

Standard program for the A.B. degree

This program emphasizes physical processes on and within the Earth. Recommended for students seeking a liberal education and interested in applying physical and mathematical principles toward an understanding of the planets, Earth and the environment.

1. Three basic supporting science courses:
   a. PHYS 0050, 0060; or PHYS 0070, 0160; or ENGN 0030, 0040.
   b. CHEM 0330 (or advanced placement).
2. Eleven (11) concentration courses:
   a. GEOL 0220, 0230, 0250, 1610.
   b. Two from GEOL 1410, 1450, 1620 (courses related to solid Earth dynamics); GEOL 1330, 1350, 1580 (courses related to climate and the environment).
   c. Three courses in mathematics, including APMA 0330.
   d. PHYS 0470; or ENGN 0510.
   e. One upper-level geological sciences, mathematics or physics course with approval from the departmental concentration advisor.

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geophysics and related fields.

1. Three basic supporting science courses:
   a. PHYS 0050, 0060; or PHYS 0070, 0160; or ENGN 0030, 0040.
   b. CHEM 0330 (or advanced placement).
2. Seventeen (17) concentration courses:
   a. GEOL 0220, 0230, 0250, 1450, 1610, 1620, plus two from this list: GEOL 1410, 1420, 1560, 1650, 1810 (courses related to solid Earth dynamics); GEOL 0240, 1330, 1350, 1580 (courses related to climate and the environment); a field course.
   b. PHYS 0470, 0500; or ENGN 0510, 1370.
   c. Four courses in mathematics, including APMA 0330, 0340.
d. Two additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.

e. GEOL 1970 (Senior Research Thesis).

**German Studies**

**Standard program for the A.B. degree**

The Concentration in German Studies offers students an interdisciplinary approach to German culture in a wide variety of areas. Along with courses from the German Studies core program, students have the opportunity to take courses from other departments and programs that deal with topics from the German cultural tradition (including History, History of Art and Architecture, Judaic Studies, Modern Culture and Media, Music, Philosophy, Political Science). 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.

Concentrators are expected to develop a course of study that will meet their particular needs and interests. In order to do this, students select an area of focus for their concentration, in consultation with the concentration advisor and other appropriate faculty. They should select at least three advanced courses in this area.

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 0450;
- At least six of the nine courses must be at the 1000-level (or higher);
- Two of the 1000-level courses must involve writing assignments in German, and students must obtain at least a grade of B in these courses;
- At least five of the nine courses must be taken in the Department of German Studies (or four if a student spends a whole year in Germany on Study Abroad);
- Completion of a Senior Seminar during the senior year (GRMN 1900) 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.

**Hispanic Studies**

The Department of Hispanic Studies offers a standard concentration program in Hispanic Studies with a track in Hispanic Language, Literature and Culture. This program provides students with a comprehensive view of Hispanic (Spain and Latin America) language, literature and culture. Both introductory and upper-level courses offer opportunities to explore a particular author, genre, period, or special topic, and to learn and use diverse analytical approaches. The overall requirement is a minimum of ten courses.

Prerequisite: HISP 0600 or placement.

1. Required courses: HISP 0730 and HISP 0740 which introduce students to standards and methods of interpretation in the field, as well as to major works, genres, and movements in the literatures and cultures of both sides of the Atlantic; and 1900 (or 1990 for students writing an honors thesis).

2. Elective courses: at least eight 1000-level courses which provide more specific preparation in major areas of Hispanic Studies. (Students should consider taking one upper-level language course, i.e., HISP 1210C or 1700).

Four of the 1000-level courses cover the principal areas of Hispanic Studies – from medieval and early modern works all the way to works in the twenty-first century.

In consultation with the concentration advisor, students also choose from four 1000-level elective courses that best suit their specific needs and interests. Concentrators are reminded that courses from Comparative Literature, History and other disciplines may be applied toward the concentration in Hispanic Studies as long as they deal with Spanish or Latin American themes, or with questions or topics that are pertinent for the study of Peninsular or Latin American culture. Individual courses may be discussed with the Concentration Advisor on a case by case basis. Up to two courses from outside of Hispanic Studies may be counted toward the concentration.

As many as four courses taken abroad may be applied towards the concentration in Hispanic Studies. These courses must meet the requirements of the concentration and be approved by the Concentration Advisor (note that they must first be approved for Brown University credit.) If you are planning to fulfill concentration requirements with courses taken abroad, please keep the syllabi and work (exams, papers) for evaluation.

**Honors:**

Students are normally required to have an A average in their concentration courses before being considered for the Honors Program. Those interested in writing a Senior Thesis should discuss this possibility with the instructor they want as their thesis advisor during the spring semester of their junior year. Applications are due by the third week of a student's seventh semester at Brown.

**History**

**Requirements for the classes of 2011.5 and before.**

In the broadest sense, history entails the study of chronologically and culturally diverse societies, considered singly and comparatively. The aim of a History concentration is to provide students with appreciation of different approaches to the study of the past and to encourage them to develop an understanding of the ways in which societies and cultures change over time. At the time of declaring a History concentration, all students must decide, in consultation with their concentration advisor and other members of the department, what particular combinations of courses will best fulfill these objectives in accordance with the following requirements:

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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1. **Basic Requirement.** A concentration in History consists of a minimum of ten semester-long courses; of these, at least eight (seven in the case of students who spend more than one semester at another institution; see "Transferring Courses" below) must be offered by the Brown University History Department.

2. **Field of Focus:** Upon declaring a concentration in History, students must define the area of history that will be the primary focus of their program. The field may be defined by place (such as South Asian history), by time and place (such as modern European history), or by topic (such as environmental history). Students are expected to complete a minimum of four courses in the primary area of focus.

3. **Geographical Distribution:** Concentrators must distribute their ten-course minimum across at least three of the eight geographic areas listed below, with a minimum of four courses in one area, three courses in a second area, and two courses in one or more other areas.

   - Africa
   - East Asia
   - Europe
   - Middle East
   - Latin America
   - North America
   - South Asia
   - Other (such as comparative, historiography, or international)

4. **Chronological Distribution:** All concentrators must distribute their courses between the pre-modern and modern periods, with at least three units in each period. Courses listed in the Banner Catalog are designated "P" for pre-modern, "M" for modern, and "E" for either. Students may elect to count courses designated as "E" as either pre-modern or modern.

5. **Introductory Courses:** Courses 1-199 include the History Department's "gateway" surveys and first-year seminars as well as other courses designed for students who desire an introduction to a particular topic. A maximum of two such courses may be counted toward the ten-course minimum for the History concentration. However, since the department encourages students to take a freshman seminar, those doing so may apply that seminar to the ten-course minimum as well, to make a total of three courses numbered 199 or below. Additionally, students are advised to take a survey sequence HIST 0010-0020, 0410-0420, or 0510-0520. Students planning to make East Asian history their primary area of focus must normally complete HIST 0410 and 0420. It is advisable for students planning to make European history their primary area of focus to take both HIST 0010 and 0020. As noted in Item 7 ("Honors"), HIST 1992, 1993, and 1994 comprise the honors sequence and may not be used to fulfill concentration requirements.

6. **Advanced Undergraduate Seminar:** All concentrators must complete at least one advanced undergraduate seminar HIST 1970's. These seminars are designed to provide students with an opportunity to delve deeply into a historical problem and, in most cases, write a major research and/or analytical paper which serves as a capstone experience. Students considering writing a senior honors thesis are advised to take an advanced seminar in their junior year.

7. **Honors:** Students who contemplate enrolling in the honors program in History should obtain the departmental brochure describing the requirements and meet with the honors advisor. Prospective honors students must take HIST 1992 during the second semester of their junior year. Students who are abroad that semester are excused from this requirement, but, as a result, it is more difficult for them to prepare to write their theses. They should find an advisor and settle upon a topic before they leave for their term of foreign study. Students in the honors program must complete HIST 1993 and 1994 during their senior year. HIST 1992, 1993, and 1994 are in addition to the ten courses required for concentration. For additional information, please consult the History Department website: www.brown.edu/Departments/History/

8. **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, and those who spend more than one semester at another institution may apply to their concentration a maximum of three courses.

   Students wishing to apply such courses must present to their concentration advisor written justification that those courses complement some aspect of their concentration. Transferred 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.

   For foreign study, it is normally expected that students will have declared their intention to concentrate in History and have their concentration programs approved before undertaking study abroad. Students taking courses in Brown-run programs abroad automatically receive University transfer credit, but must discuss history courses with a concentration advisor in order to receive concentration credit. Students taking courses in other foreign-study programs or at other universities in the United States must apply to the Department Advisor for transfer credit.

   Final transfer and concentration credit will not be granted until the student successfully completes the course(s) and returns to Brown. Approval by the department advisor for transfer credit will be contingent on satisfactory course content and performance (to be demonstrated by documents such as a transcript showing the grade, syllabi, notes, papers, exams, etc.).

9. **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.

**Requirements for Class of 2012 and Later**

In the broadest sense, history entails the study of chronologically and culturally diverse societies, considered singly and comparatively. The aim of a History concentration is to provide students with an appreciation of different approaches to the study of the past and to encourage them to develop an understanding of the ways in which societies and cultures change over time. At the time of declaring a History concentration, all students must decide, in consultation with their concentration advisor and other members of the department, what particular combinations of courses will best fulfill these objectives in accordance with the following requirements:

1. **Basic Requirement:** A concentration in History consists of a minimum of ten semester-long courses; of these, at least eight (seven in the case of students who spend more than one semester at another institution; see "Transferring Courses" below) must be offered by the Brown University History Department, including cross-listed courses.

2. **Introductory Courses:** Students may count no more than two lecture surveys numbered 0520 or lower and only one HIST 0970 or
HIST 0980 seminar toward the concentration requirements. It is recommended that concentrators in their first or second years take a HIST 0970 series seminar or a HIST 0980 series seminar for a seminar-based 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 minimum of four courses. The field may be defined by geographical regions (see #4), by geographical regions with thematic or chronological emphases, or by topic.

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 distribute nine of the ten required courses as follows: four courses in the primary geographic area. Thereafter, five courses in two or more secondary areas, with a maximum of three in any of these areas. Comparative and transnational courses may count for the geographical requirement with the approval of the concentration advisor. The geographic areas are:

- Africa
- East Asia
- Europe
- Latin America and the Caribbean
- Middle East and South Asia
- North America

5. **Chronological Distribution:** All History Department courses are designated “P” for pre-modern, “M” for modern, and “E” for either pre-modern or modern. Concentrators must complete at least three courses in the pre-modern period and three courses in the modern periods. Two of the courses must be designated “P” and two must be designated “M”. Courses designated “E” may fulfill the requirements for a third course in each category.

6. **Capstone Seminar:** All concentrators must complete at least one capstone seminar (HIST 1960, HIST 1970 and HIST 1980 series seminars). 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. **Honors:** To be admitted to the honors program, 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. Honors is normally a three-semester process, with students taking HIST 1992, “History Honors Workshop for Prospective Thesis Writers,” one semester and HIST 1993, “History Honors Workshop for Thesis Writers,” for two semesters. Both classes will be offered every semester, so students may begin the process in either their 5th or 6th semester.

HIST 1992 is strongly recommended but not required. The class may count as one of the 10 courses required for graduation in history. Students may be admitted into HIST 1993 in one of two ways.

Students who take HIST 1992 in the 5th semester can finish the thesis in the 7th semester. Students who take HIST 1992 in the 6th semester will finish it in the 8th semester.

Students who contemplate enrolling in the honors program in History should consult the department website. They are also encouraged to meet with the Director of Undergraduate Studies, who serves as the honors advisor.

8. **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. The total number of courses from other departments or institutions may not exceed three.

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 automatically receive University transfer credit, but concentration credit is granted only with the approval of a concentration advisor. Students taking courses in other foreign-study programs or at other universities in the United States must apply to the Transfer Credit Advisor.

Final transfer and concentration credit will not be granted until the student successfully completes the course(s) and returns to Brown. Approval by the department advisor for transfer credit will be contingent on satisfactory course content and performance (to be demonstrated by documents such as a transcript showing the grade, syllabi, notes, papers, exams, etc).

9. **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.

**History of Art and Architecture**

The concentration introduces students to the history of art, architecture, and visual culture as a humanistic discipline. Students will receive essential training in perceptual, historical, and critical analysis that will allow them to pursue career opportunities in art and architectural history as well as a range of other professions. Career
choices for students concentrating in History of Art are as diversified as any within the University. In addition to the interdepartmental fields with which the discipline naturally is linked - college and university teaching, architecture, gallery and museum curating - graduates pursue careers in education, law, historic preservation, urban planning, and publishing, to cite a few possibilities.

The concentration allows students to explore a variety of courses in Western and non-Western art and architecture ranging over a wide time period. Students are encouraged to pursue in-depth studies of a particular area or issue through seminar courses. These more advanced courses are designed to give concentrators an awareness of the critical strategies available for interpretation of historical and cultural phenomena, and to foster research skills.

The concentration total ten courses (eleven for honors). There are no prerequisites, but our general survey in history of art and architecture HIAA 0010 is an excellent foundation for the concentration. Students may receive concentration credit for this course. Please remember that these figures are only the minimum requirements and that we expect concentrators to take more than just the minimum number of classes in the subject of their choice.

Students must demonstrate reading proficiency in another language, since foreign language skills are essential for pursuing art historical studies in a professional environment or graduate school. Students with a previous language experience will be asked to take a placement test and/or demonstrate a 400 level reading ability. Since the history of art and architecture addresses issues of practice within specific historical contexts, concentrators are asked to take at least one studio art course, and courses in history that pertain to their area of emphasis. Study abroad can be a valuable enrichment of the academic work available on campus, in that it offers opportunities for first-hand knowledge of works of art and monuments as well as providing exposure to foreign languages and cultures. Study abroad should be planned in consultation with the concentration advisor in order to make sure that foreign course work will relate meaningfully to the concentrator's program of study. Only two courses taken outside the department may count for concentration credit (including courses taken abroad and at other institutions in the United States). These credits will be counted as lecture courses, not seminars and cannot replace any of the six core classes. There is a maximum of two outside credits for courses taken at other universities (transfer credits or from study abroad programs), or courses that also count towards a second concentration. No concentration credit for High School AP, Subsidiary AP, A level etc. courses. No concentration credit for High School AP, Subsidiary AP, A level etc. courses. No concentration credit for High School AP, Subsidiary AP, A level etc. courses. No concentration credit for High School AP, Subsidiary AP, A level etc. courses.

The 6 core lecture courses and seminars have to be taken in the department and cross-listed courses elsewhere. HIAA 0010 - 1890 are seminars dealing with specific problems or issues in, art, architecture and theory and are designed for students with a previous language experience who are encouraged to pursue in-depth studies of a particular area or issue through seminar courses. These more advanced courses are designed to give concentrators an awareness of the critical strategies available for interpretation of historical and cultural phenomena, and to foster research skills.

The concentration consists of ten courses (eleven for honors):

- 4 general lecture core courses, (HIAA 20 - HIAA 0940) distributed between 3 of the 7 available areas of the discipline. (Ancient / Medieval / Islamic / East Asian / Latin American / Early Modern (ca. 1400-1800 / Modern, Contemporary)
- 2 seminar core courses (numbered between HIAA 1040 and 1980)
- 4 courses that can include other courses taught in the department and cross-listed courses elsewhere. HIAA 0010 will count as 1 of these courses, but will not count as 1 of the 4 core lecture classes. Students are encouraged to take 1 studio class as part of these 4 courses.
- The 6 core lecture courses and seminars have to be taken in the department and can NOT be replaced with an independent study/honors thesis/classes taken in other departments, universities, or high schools.

- Language requirement: (A recent placement test for a 400 level reading capacity, or passing of a 400 level language class has to be provided and will become part of the record.)
- Maximum 2 outside credits for courses taken at other universities (transfer credits or from study abroad programs), or courses that also count towards a second concentration. No concentration credit for High School AP, Subsidiary AP, A level etc. courses. No concentration credit for High School AP, Subsidiary AP, A level etc. courses.

Honors: The Honors program in History of Art & Architecture and Architectural Studies will be administered as follows: accepted students will sign up for the Honors program in the Fall. In the Fall, students will meet regularly with the whole Honors group and HAA 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 for the concentration. It is advisable for them to have taken at least one seminar in the department and written a research paper before choosing to undertake a thesis. While acceptance into the Honors program depends on the persuasiveness of the thesis topic as well as the number of students applying, students may refine their proposals by speaking in advance with potential advisors. No honors student may take more than four courses either semester of their senior year--HIAA 1990 being considered one of your four courses. 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:
Towards the end of the Spring semester all concentrators will be notified via the DUG List-serve that the application process is open. In order to apply to the Honors program each student should write up a proposal of no more than two double-spaced pages stating the topic (subject and argument) of the research to be undertaken as clearly as possible, along with 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 Spring semester.

Capstone Project:
Those students who are not enrolled in the honors program are encouraged to develop one of their seminar papers into a capstone project, in consultation with the instructor. This paper can contain additional research, the application of the research to a catalog or website project etc.

While capstone projects will not be mandatory, they will be highly recommended. Capstones can include honors theses, UTRA's, undergraduate TA-ships, internships, perfecting a seminar paper, GilP, GLP, etc. The capstone and any related course of study, including internships, must be approved and overseen by a faculty sponsor.

Self-Assessment:
All concentrators are required to write an essay when they file for the concentration that lays out what they expect to gain from the course of study they propose. All second semester seniors will be required to

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ssa/hwwkcssearch_public_P_Main).
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.

Attendance at lecture events and conferences in the HIAA
department is strongly encouraged.

Architectural Studies Track

The Architectural Studies concentration track within the Department of
History of Art and Architecture 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. The concentration requires four lecture
courses and two seminars in the history of architecture and urbanism
that are offered by the Department of History of Art and Architecture.
One of the seminars is a project seminar, taken in junior or senior year,
and is designed as a capstone experience for the Architectural Studies
concentrator. Courses that may be counted toward the concentration
are listed with an "A" at the end of their descriptions in the Course
Announcement Bulletin.

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, theatre set design at Brown University or the
Harvard GSD’s summer school or similar six week+ courses in drafting
or design instruction.

- Students will be able and are encouraged to take cross listed pertinent courses from such departments or programs as American Civilization, Center for Old World Archaeology and Art, Engineering, Mathematics, History, Modern Culture and Media, Urban Studies, and Visual Art, and Engineering, in addition to those offered by the Department.

- Students may count courses that have been numbered in the department (including HIAA 0010) and cross-listed courses in another department that are pertinent to the concentrator's program of study.

- In years when no project seminar is offered, any seminar
chosen in discussion with the concentration advisor) is
required of all concentrators and is taken in junior or senior
year. Priority is given to architectural studies concentrators.

- The project seminar (HA 1910 or acceptable substitute to be
counted toward the concentration) is required of all concentrators and is taken in junior or senior year. Priority is given to architectural studies concentrators.

- In years when no project seminar is offered, any seminar
that qualifies for architectural studies can become the
starting point for a senior project.

- The two above seminars can NOT be replaced with an
independent study/honors thesis/classes taken in other
departments or universities.

- One studio art course in design (at Brown, RISD, Harvard Career Discovery and similar 6 week + summer courses)

- Three additional courses. These can include other courses
taught in the department (including HIAA 0010) and cross-
listed courses in another department that are pertinent to
architectural studies. They also include a select number of
non-cross listed courses that are approved by the
concentration advisor. These include (but are not limited to
MATH 0090 and 0100, PHYS 0030 and 0040, ENGN 0030,
urban studies and engineering courses, and scenic design and
technical production (Department of Theatre Arts and
Performance Studies)

- Language requirement (A recent placement test for a 400
level reading capacity, or passing of a 400 level language
class.)

- Maximum two outside credits for courses taken at other
universities (transfer credits or from study abroad programs),
or courses that also count towards a second concentration.
No concentration credit for High School AP, Subsidiary AP.

- A level etc. courses. No concentration credit for language
classes.

It is expected that concentrators will wish to 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). Students are encouraged to formulate their own coherent program of study.

Honors:
The Honors program in History of Art & Architecture and Architectural Studies will be administered as follows: accepted students will sign up for HIAA 1990 in the Fall and in the Spring. In the Fall, students will meet regularly with the whole Honors group and HAA 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 advance with potential advisors. No honors student may take more than four classes either semester of their senior year--HIAA 1990 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:
Towards the end of the Spring semester all concentrators will be
notified via the DUG Listserv that the application process is open. In
order to apply to the Honors program each student should write up a
proposal of no more than two double-spaced pages stating the topic
(subject and argument) of the research to be undertaken as clearly as
possible, along with a one-page bibliography of the most relevant

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
books and major articles to be consulted for the project. This three page application should be submitted, along with a résumé 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 Spring semester.

Capstone Project:
Those students who are not enrolled in the honors program are encouraged to develop one of their seminar papers into a capstone project, in consultation with the instructor. This paper can contain additional research, the application of the research to a catalog or website project etc.

While capstone projects will not be mandatory, they will be highly recommended. Capstones can include honors theses, UTRA's, undergraduate TA-ships, internships, perfecting a seminar paper, GISP, GILP, etc. The capstone and any related course of study, including internships, must be approved and oversee by a faculty sponsor.

Self-Assessment:
All concentrators are required to write an essay when they file for the concentration approval. This self-assessment should be turned in with a revised list of courses actually taken and the final paperwork for concentration approval.

Attendance at lecture events and conferences in the HIAA department is strongly encouraged.

Human Biology

Human biology is an interdisciplinary concentration whose goals are to provide a rigorous foundation in the biological sciences with substantive course work in humanities and social sciences. This approach is based on the understanding that biology and human impacts are inextricably related within the fields represented in each of the four program tracks: Health and Disease, Brain and Behavior, Race and Gender; and Ecosystems, Evolution and Environment.

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 comprised of a flexible menu of intermediate and advanced courses. A required portion of the Biology core is Genetics, which is considered a cornerstone of human biology and its interface with other fields.

The Biology core underscores the related coursework within the chosen Track. The Tracks are built of predominantly social science and humanities courses and must form a cohesive, thoughtful grouping. Suggested track subfoci must be discussed and approved by an advisor. It is expected that these course selections will evolve over the course of the student's college career, as each semester's experience builds on the previous ones.

Finally, the human biology program requires a Senior year CAPSTONE course or experience, which should build on the program’s theme. The capstone may be a research project, an advanced seminar, or an academic internship.

Students who complete the Human Biology program are prepared for a variety of professional paths and graduate programs. Examples include health careers, clinical psychology, environmental law, conservation, academic science, epidemiology, health education, and teaching.

A.B. Program:

Required Coursework:

1. MATH 0090; CHEM 0330; BIOL 0200 (or equivalents).

2. Statistics or Methods course (chosen with advisor's approval); examples: CLPS 0900; SOC 1100; APMA 0650, 1650; EDUC 1110; PHP 2120 and others; MATH 1600; ECON 1620.

3. Biology: Five courses including:
   a. Genetics, which can be fulfilled in the following ways:
      BIOL 0470 (Genetics)
      or
      BIOL 0480 (Evolutionary Biology) PLUS 0500 (Cell & Molecular Biology)
      or
      BIOL 0480 (Evolutionary Biology) PLUS 0510 (Microbiology)

      NOTE: These latter two options involve TWO courses both of which would therefore count as part of the biology course portion of the program. Also, BIOL 0480 serves as the organismal/population biology course that is required, if desired.
   b. One course in structure, development, and physiology such as BIOL 0300, 0310, 0320, 0400, 0440, 0800, 1310, 1800, 1880; NEUR 0010.
   c. One course in organismal/population biology such as BIOL 0380, 0390, 0400, 0410, 0420, 0430, 0460, 0480, 1410, 1430, 1460, 1480, 1880; ENVS 0490.
   d. Two biology (BIOL or NEUR) courses that relate to and support the chosen theme (see below); at least one of these at the 1000 level.

4. Tracks: Choose one of the four Tracks and take four additional courses, usually chosen from outside BIOL offerings. These MUST form an approved, cohesive grouping.

   a. Human Health and Disease: These courses are usually chosen from these departments: ANTH, PHP, CLPS (PSYC, COGS), EDUC, SOC, HIST.

   Examples of subthemes for Health and Disease:
   • Health Behavior
   • Health Education
   • Health Systems Structure and Policy
   • Culture and Health
   • International Health
   • Women's/Children's Health

   Race and Gender: Courses focusing on culture, gender, history, and race: AFRI, AMCV, ANTH, PHP, BIOL, CLPS (COGS, PSYC), EDUC, HIST, POBS, SOC.
Examples of subthemes for Race and Gender:
- Individual development of racial, ethnic identity in the U.S. or elsewhere
- Race and gender in comparative cultures
- Gender expression in specific racial or ethnic populations in the U.S. or elsewhere

**Brain and Behavior**: Courses in ANTH, CLPS (COGS, PSYC), NEUR, EDUC, and SOC dealing with behavioral science.

**Ecosystems, Evolution and Environment**: CLPS (COGS, PSYC), ENVS, GEOL, ANTH courses dealing with evolution, behavior, communication, the environment.

**STIPULATIONS for Track courses**:

1. All courses to be included must be approved by the advisor, and represent a coherent grouping.

2. Track courses should be taken mainly outside of biological sciences, in keeping with the interdisciplinary intent of the program.

**Senior Capstone Activity**: May be fulfilled by an independent study such as Directed Research Project (BIOL 1950/1960); a suitable advanced course or seminar such as BIOL 1920C; or an appropriate, approved internship with academic emphasis. The Capstone activity must be approved by the concentration advisor. Honors in Human Biology is based on research, thesis and presentation (see http://bms.brown.edu/bug/ugres.html).

**NOTE**: The inclusion of independent study courses (such as BIOL 1950/1960) within this program, and their fulfillment of the advanced level course requirements are subject to approval by the advisor.

**Sc.B. Program**:

Same as the A.B. program with the following additions:

1. CHEM 0350
2. A sixth advanced 1000-level biology course
3. A fifth advanced 1000-level Theme course
4. The Capstone must be an approved, for-credit, research project, expected to span two semesters.

**Capstones in Human Biology**

Sample Capstones in Human Biology may be found at: http://bms.brown.edu/bug/hb_capstones.html

**Independent Concentration**

Independent concentrations represent a distinctly personal and individualized approach to undergraduate education. An independent concentrator creates his or her own program of study, organizing a body of courses from several departments around a central theme, topic, or set of related inquiries. The approach and coursework draw on different existing departments, but the concentration must articulate a coherent field of study, with a disciplinary focus and cohesive connection between its various components. This program encourages students to strengthen their skills in a subject or area of knowledge that is academically rigorous and intellectually rewarding.

The independent concentration must explore some question or field of study that cannot be explored in a similar way in one of the standard concentrations available at Brown. Like all concentration programs at Brown, independent concentrations must articulate how the concentration is part of the Liberal Arts program at Brown, and must, therefore, accord with Brown's Mission Statement. Concentrations that focus on vocational, technical, or business training of the kind not offered at Brown will not be accepted.

The process of filing an independent concentration is coordinated by a designated academic dean in the Office of the Dean of the College. While the majority of independent concentrations are unique and require multiple phases of formulation and approvals, the following tracks and their respective requirements have been formally approved and require only sign off from the respective concentration advisor(s) in the department(s) associated. *Note well: If the track is jointly offered it requires sign off from both departments.* Once declarations have been approved by the advisor(s) the student needs to bring them to the representative in the Office of the Dean of the College for final approval and ultimately to the Office of the Registrar.

**Pre-Approved Tracks**

**Modern Culture and Media-French Track**

This track is offered jointly by the Department of French Studies and the Department of Modern Culture and Media. It is intended for students who wish to receive special preparation in French language and literature, with emphasis on contemporary semiotic theory, and those students whose primary interest is in theory and who wish to strengthen their knowledge of French language, literature, and culture. In addition to a Senior Thesis, students will take five courses in French and five in Modern Culture and Media. Students wishing to declare this concentration must select an advisor from each of the two sponsoring departments.

**Required courses**:

- two courses in French language - FREN 0500, 0520, 0600 or 1510
- three upper level courses in French literature, language and civilization
- one introductory course in Modern Culture and Media - MCM 0150
- two or three additional courses in semiotic theory
- and one or two courses in semiotic production

**Honors**: Students who qualify for Honors in the Independent Concentration, Modern Culture and Media-French track are eligible to apply to do an Honors project or thesis. Applications will be screened by both MCM and French Studies. Applications forms should be submitted by prospective honors students in the beginning of the 7th semester. They are available in the MCM office.) If approved, a student must then register for MCM 1990 or FREN 1990, a one-credit thesis course in which they complete the Honors project.

**Modern Culture and Media-German Track**

This track is offered jointly by the Department of German Studies and the Department of Modern Culture and Media. It offers interested students an opportunity to explore the phenomenon of "Germany" using the approaches of cultural theory. Students will take a number of required courses through which they learn the basic theories and approaches to issues of language and meaning, subjectivity and identity, ideology and consciousness, gender and sexuality, and theories of narrativity. Other courses offer the student an overview of the German textual traditions in literature, philosophy, music, film, and the fine arts. German language proficiency is expected of all participants in the program and may be gained by a variety of approaches available within the German Studies Department. Overseas study at Berlin's Humboldt University or in special cases at an equivalent institution is considered a normal part of this joint concentration. All students will be required to complete a final project.

**Requirements in addition to Senior Thesis**:

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Pre-requisites:

1. Two courses from among:
   - MCM 0100: Screens and Projections: Modern Media Cultures
   - MCM 0150: Text/Media/Culture: Readings in Theory
   - MCM 0230: Digital Media
   - MCM 0240: Television Studies
   - MCM 0250: Visuality and Visual Theories
   - MCM 0260: Cinematic Coding and Narrativity
   - MCM 1110: The Theory of the Sign

2. GRMN 0900, Introduction to German Studies

Requirements:

1. Two courses in German Studies at the 1000-level with topics relevant to the focus area

   1. A senior thesis: GRMN 1990 or MCM 1990

   2. Six courses from the following:
      - Strongly recommended for all concentrators:
        - HIST 1370: Germany, 1914 to the Present, or
        - COLT 1210: Introduction to the Theory of Literature
      - Also recommended:
        - HIAA 0850: Modern Architecture,
        - GRMN 1440: Studies in Literary Genre,
        - GRMN 1450: Seminars in German Literature,
        - MCM 1200: Special Topics in Modern Culture and Media,
        - MCM 1500: Senior Seminars in Modern Culture and Media,
        - PHIL 1660: Metaphysics

Students are encouraged to examine the Course Announcement carefully in consultation with their advisors to select courses that augment their concentration and, in particular, inform their final projects. In addition, students will normally complete two to four of those electives while studying in Berlin or at another location approved by the concentration advisor.

4. Students who are unable to study in Germany will be required to demonstrate reading knowledge of German.

   Students are encouraged to consult with the concentration advisors for German Studies and Modern Culture and Media as early as possible in order to begin planning their course work sequences and their final project.

Modern Culture and Media-Italian Track

This track is offered jointly by the Italian Studies Department and the Department of Modern Culture and Media. The program includes 11 courses.

Requirements in addition to Senior Thesis:

The following 6 courses are to be taken in the Italian Studies Department:

- ITAL 0950: Introduction to Italian Cinema
- ITAL 1000: Studies in Contemporary Italian Culture
- ITAL 1030: Realism and Utopia in Italian Film
- Any 3 courses of the following:
  - ITAL 1340: Garibaldi and the Risorgimento
  - ITAL 1350: Contemporary Italian Literature
  - ITAL 1390: Modern Italian History
  - ITAL 1400: Special Topics in Italian Studies

The following 5 courses are to be taken in the Modern Culture and Media Department:

- Any 3 courses of the following:
  - MCM 0100: Screens and Projections: Modern Media Cultures
  - MCM 0150: Text/Media/Culture: Readings in Theory
  - MCM 0230: Digital Media
  - MCM 0240: Television Studies
  - MCM 0250: Visuality and Visual Theories
  - MCM 0260: Cinematic Coding and Narrativity
  - MCM 1110: The Theory of the Sign

At least 1 course numbered MCM 1200

At least 1 course numbered MCM 1500

Students are encouraged to consider study at the University of Bologna through the Brown Program in Bologna, though this is by no means a requirement for fulfillment of the program. Courses taken at the University of Bologna may substitute for Italian Studies and MCM courses (no more than 2 from either department) at the discretion of the student’s advisors.

Honors: Honors will require a thesis and will normally be undertaken by signaling intent during the junior year.

Statistics Track

Statistics has a theoretical core surrounded by a large number of domains of application in diverse fields, including economics, psychology, biology and medicine, sociology, population sciences, government, anthropology, astronomy, physics, chemistry, geology, engineering, and computer science. At Brown, graduate training in Biostatistics is available in the Department of Community Health and in Mathematical Statistics in the Division of Applied Mathematics. In addition, several other departments are offering introductory and even advanced courses in statistical methodology, including the Departments of Economics, Sociology, Cognitive, Linguistic and Psychological Sciences, Political Science and Computer Science.

The Undergraduate program in Statistics, established in 1997, is an interdepartmental program, administered by the Center for Statistical Sciences and leading to the Sc.B. degree. It is supervised by a faculty program committee, representing all interested departments. The program is constructed on several premises: that statistics is a scientific discipline in its own right, with its characteristic methodology and body of knowledge; that it is essentially concerned with the art and science of the analysis of data; and that it is best taught in conjunction with specific, substantive applications. To this end, the concentration is designed to provide a foundation of basic concepts and methodology.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
requiring students to take core courses in the discipline itself, and to expose students to a cross-section of statistical applications, through courses (of their own selection and subject to approval) in the social, biological, and natural sciences. In a senior honors thesis, each student will be required to carry out a major project of statistical data analysis in one of these disciplines. The program 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.

Requirements in addition to Senior Thesis:

The program begins with a foundation in mathematics and computing, combined with an elementary introduction to statistical thinking and practice. A set of three core courses builds on this foundation by providing a comprehensive account of the fundamentals of statistical theory and data analysis. At this point, the students in the concentration are ready to delve into more advanced material covering important areas of statistical methodology. In addition to formal coursework, students will have opportunities to acquire practical experience in study design, data management, and statistical analysis by working as undergraduate research assistants in projects in one of the participating academic departments or research centers at Brown. The program requires twelve one-semester courses and participation in the senior seminar. The required courses are as follows:

Level I: Foundations

- Mathematics: Three courses, including courses in multivariate calculus and linear algebra.
- Computing:
  - APMA 0160: Introduction to Computing Sciences
- Introduction to statistical thinking and practice: one of the following
  - SOC 1100: Introductory Statistics for Social Research
  - ECON 1620: Introduction to Econometrics
  - APMA 0650: Essential Statistics

Level II: Core courses in theory and data analysis

- Foundations of mathematical statistics:
  - APMA 1650, 1660: Statistical Inference
  - or MATH 1610: Probability, 1620: Mathematical Statistics
- PHP 2510: Principles of Biostatistics and Data Analysis

Level III: Advanced courses in statistical methods

- PHP 2511: Applied regression analysis
- Two electives from the following courses:
  - Social Sciences:
    - ECON 1630, 1640: Econometrics
    - ECON 2030: Introduction to Econometrics I
    - ECON 2040: Econometric Methods
    - ECON 2630: Econometric Theory
    - ECON 2640: Microeconometrics
    - SOC 210: Multivariate Analysis
    - SOC 2220: Advanced Quantitative Methods of Sociology Analysis
    - SOC 2230: Techniques of Demographic Analysis

Prospective students will be able to obtain Advanced Placement credit for the requirements in mathematics, computing, and introductory statistics. 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.

Honors: Honors work in the Independent Concentration, Statistics track requires the completion of a senior thesis and a superior record in the program. The program is administered by the Center for Statistical Sciences, located at 121 South Main Street, 7th floor.

International Relations

The International Relations (IR) concentration is a rigorous program that combines student choice with cross-disciplinary training in international and comparative perspective. The IR curriculum emphasizes:

1. a solid grounding in the methods of analysis used in the social sciences and humanities to help students think critically about international phenomena,
2. the exploration of the empirical and the normative domains of the subject, and
3. flexibility to allow students to customize their IR concentration.

The objective is to foster creative thinking about pressing global problems and 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, religion, and environmental studies, and has a 3-year language requirement.

The IR concentration is organized around a multidisciplinary core and two sub-themes: security and society, and political economy and culture. It offers a quality honors program in which students undertake thesis research on an international topic. The concentration is located within and draws upon the expertise of the Watson Institute for International Studies, a research and policy-oriented center whose faculty come from many different countries and international agencies.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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1. **The core courses (5 courses):** Required for all students, preferably to be taken during their freshman or sophomore years. These five courses provide a multidisciplinary, conceptual basis for approaching international relations. Advanced Placement credit does not count toward the concentration. The five courses are:
   - ANTH 0110: Anthropology and Global Social Problems
   - ECON 0110: Principles of Economics
   - HIST 1900: American Empire Since 1890
   - POLS 0400: Introduction to International Politics
   - SOC 1620: Globalization and Social Conflict

2. **The Tracks (5 courses from ONE track):** (This is only a subset of the more comprehensive list of applicable courses.)

   - **Security and Society:**
     - **Conflict (2 or 3) for example:**
       - ANTH 1232: War and Society
       - ANTH 1411: Nations within States
       - HIST 1350: Modern Genocide and Other Crimes against Humanity
       - INTL 1280: Global Security After the Cold War
       - POLS 1560: American Foreign Policy
     - **Society (2 or 3) for example:**
       - ANTH 1233: Ethnographies of Global Connection: Politics, Culture and International Relations
       - INTL 1400: Religion and Global Politics
       - INTL 1800I: Global Migration and Citizenship
       - INTL 1800N: Global Media: History, Politics of Human Rights
       - POLS 1500: The International Law and Politics of Human Rights
       - POLS 1821M: War in Film and Literature

   - **Political Economy and Society:**
     - **Economics (3)**
       - ECON 1110: Intermediate Microeconomics
       - ECON 1210: Intermediate Macroeconomics
       - One of the following Economics courses:
         - ECON 1500: Current Global Macroeconomic Challenges, or
         - ECON 1540: International Trade, or
         - ECON 1550: International Finance
     - **Political Economy (2) for example:**
       - ANTH 0450: Two Billion Cars: Humans, Markets, Cultures, and the Automobile pending approval
       - ANTH 1324: Money, Work and Power: Culture and Economics pending approval
       - INTL nnnn: Political Economy of South East Asia pending approval
       - POLS 1020: Politics of the Illicit Global Economy

   - **Regional Focus (2 courses):** Both courses must be on the same area. Students are required to link these with language study.

   - **Research Methods (1 course):** Prior to 7th semester. Quantitative or qualitative course from approved list.

   - **Senior Capstone (1 course):**
     - a. one-semester seniors-only INTL seminar, or
     - b. honors thesis (2 courses: INTL 1910, INTL 1920)
     Must be taken senior year. Must incorporate language skills.

   - **Language Requirement:** Three full years of university study or equivalent (see IR website).

   - **Study Abroad:** Strongly Recommended.

Detailed lists of courses that satisfy these requirements may be obtained from the IR program website: www.watsoninstitute.org/IR.

The program is administered by affiliated faculty from different departments at Brown. It has a director, an assistant director/concentration advisor, and a faculty advisor for each track to assist students in planning their academic programs.

### Italian Studies

It is quite possible to concentrate in Italian studies without having studied the language before coming to Brown, although doing so requires an early start. Having fulfilled the language requirement (Italian 0600), students will be able to enroll in a variety of advanced courses taught in Italian, reflecting the interdisciplinary scope of Italian studies at Brown (including literature, history, history of art, media and culture). Students are strongly encouraged to take Italian Studies courses taught in English before fulfilling the language requirement.

The concentration requires that students demonstrate proficiency in the Italian language by completing up to Italian 0600 (or the equivalent in Bologna). Italian 0600 is the first language course that counts toward the eight required courses for the concentration. At least four of the eight courses should be taken in Italian.

#### Italian Studies 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 (Italian 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 Italian 0600.

Credits toward the Italian Studies concentration may also be transferred from the Brown in Bologna Program. Concentrators may count three courses per semester toward the concentration (or six courses total for the year), although the course content must focus on Italy if the student wishes to count the course toward the concentration requirements. Concentrators should consult the concentration advisor to know which courses may or may not transfer as credits toward the concentration.

For complete, up-to-date course information please see or the Brown Course Search tool ([https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main](https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main)).
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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 Italian Studies 2920 (Independent Study), and have their project approved by their advisor by October 15. During the second semester, honors students enroll in Italian Studies 1990 and continue to work with their advisor to complete the project. Italian Studies 1990 does not count as one of the eight courses required for the concentration.

CAPSTONE experiences in Italian Studies

A Capstone experiences in Italian Studies would consist of a course or project that a student, in consultation with the undergraduate advisor, feels would integrate the various intellectual engagements of this interdisciplinary concentration, and constitute a culminating experience in Italian Studies at Brown. Such experiences are strongly encouraged, and should be arrived at through conversations with the concentration advisor or a professor in the department. This could include the Brown Program in Bologna, typically taken in the Junior year, and/or the honors thesis in the senior year. However, students may also apply early in the Fall or Spring semester of their senior year for permission to designate one of their courses (1000-level or above) a Capstone course. In consultation with the professor, students in Capstone courses complete an independent research, writing, or multimedia project that is well beyond the required assignment for the course. Italian Studies 1920 (Independent Study) may also be designated a Capstone course with the permission of the instructor.

Judaic Studies

The concentration in Judaic Studies allows students to learn how several academic disciplines deal with a single subject, the study of Jews and Judaism. The principal disciplines represented in the Program are History, Language (Hebrew, Aramaic), Literature, Religious Studies, and Sociology. The Program thus joins humanistic and social scientific approaches to learning. The educational goal of the concentration is to show how different scholarly disciplines approach the study of Jews and Judaism in different chronological settings ranging from biblical times to the present. This interdisciplinary approach aspires to two goals: first, it aims to instill in students some substantive understanding of the historical, religious, literary, philosophical, sociological and political experiences of the Jews; second, it demonstrates how scholars of diverse academic disciplines frame questions and answer them, thus providing the student with some understanding of what it means to approach the same subject with different perspectives and methodologies. The concentration requires a year of course work in Hebrew, for the Hebrew language is one of the strands that unifies the history of Judaism from ancient to modern times, and a knowledge of Hebrew is indispensable for any serious study of Judaism.

Required Coursework

- Six topical courses in Judaic Studies
- JUDS 0110 and JUDS 0120 Introduction to Modern Hebrew
- Two additional JUDS courses either topical or language

Topical courses (non-language courses)

- Upon declaring a concentration in Judaic studies, students must define the area of study that will be the primary focus of their program. The field may be defined as an historical period (ancient/modern), as a discipline (humanities/social science), or as a topic (religion, culture, history, language/literature, etc.). Students are expected to complete a minimum of four courses in their area of focus, but the final number will be finalized in discussion with the concentration advisor.
- Of the six required topical courses, four must be taken in the Judaic Studies Program at Brown.
- Of the six required topical courses, at least one should focus on the ancient period and one should focus on the modern period.
- Of the six required topical courses, at least one should be a 1000-level seminar or another advanced course (including independent study) approved by the concentration advisor in the student's area of focus.
- In either their junior or senior year, all concentrators will be required to take a seminar in Judaic Studies that focuses on a specific comparative and historical theme. The goal is to provide an interdisciplinary and integrated experience for Judaic Studies concentrators. The theme will vary from year to year, depending on faculty interest, and will always involve the participation of several faculty members in Judaic Studies coordinated by one Judaic Studies faculty member. Potential topics include but are not limited to: Jewish Ethnicity and Religion; Jewish-Non-Jewish relationships; Jewish Families; Jews in Cities; Gender and Jewishness; Jewish intermarriages; the literature of the Jews. Preferably, the seminar will be taken in the senior year.
- All students are required to designate an advanced departmental course as the capstone for his or her concentration. Within the frame of this capstone course, the concentrator will write a final course paper, which displays the student's concentration focus, addressing in an appropriate way the theoretical and interpretive issues of the concentration focus. Students are encouraged to fulfill this requirement in the comparative Judaic Studies seminar.
- In consultation with the concentration advisor, students may petition for the right to apply up to two courses taken in other departments/programs at Brown to the ten required for the Judaic Studies concentration. These courses must relate directly to the student's focus and provide a comparison of a Judaic topic with some other relevant topic.
- Students who study at other institutions, either in the United States or abroad, may apply a maximum of two topical courses to their concentration in Judaic Studies. Hebrew language courses may also be transferred.
- In consultation with the concentration advisor, students may apply up to two advanced language courses (JUDS 0150 or 0300) to the six required topical courses for the concentration.

Language Courses

- One full year of Elementary Hebrew. Generally, this requirement will consist of two courses in Modern Hebrew (JUDS 0110 and JUDS 0120) or the equivalent as determined by a proficiency examination. Students who pass the proficiency exam are encouraged, but are not required, to continue the study of Hebrew (for example, Intermediate Hebrew, JUDS 0130 and JUDS 0140; Writing and Speaking Hebrew, JUDS 0150). Fulfillment of the Hebrew requirement through examination does not reduce the requirement to take ten courses for the concentration.

Honors Thesis

A candidate for honors in Judaic Studies will write a thesis in the senior year. In order to be considered a candidate for honors, students will be expected to maintain an outstanding record (at least A-) in Judaic

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Latin American and Caribbean Studies

The concentration in Latin American and Caribbean Studies is designed to help students develop an interdisciplinary understanding of culture, history and contemporary issues in Latin America and the Caribbean. Social, political, economic, literary, and cultural factors combine to explain the Latin American societies of today. Concentration in Latin American and Caribbean Studies provides the opportunity to use the methods of various disciplines and integrate different ways of knowing.

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, 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 LAST 1990-1991), 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 (LAST 1990-1991). In order to integrate the diverse perspectives gained in courses and readings, seniors may elect to complete a Senior Thesis or Project under the direction of one faculty member. Seniors will also choose one additional faculty member to serve as a reader. The reader will receive a draft and a finished copy of the student's thesis or project, which the reader will be responsible to grade. The reader may be involved in the earlier development of the thesis or project depending upon the arrangement made by the student with the reader. The Senior Thesis or Project will normally consist of a major research paper. A student may, with prior permission of the Latin American and Caribbean Studies Concentration Advisor, present a film, videotape, museum exhibition, or other appropriate project, together with a paper that clearly demonstrates the academic relevance of the project. Only the Senior Thesis qualifies the student (along with a minimum B+ average) for Honors. The Senior Project is quite often of a more personal nature, such as observations on practice teaching or a survey of social resources on Latin America. Near the beginning of the seventh semester, students should submit to the concentration advisor a 5 to 8 page prospectus accompanied by the signature of one faculty member indicating that he or she is willing to serve as primary advisor on the project.

If a concentrator chooses to do neither a senior thesis nor a senior project, then a research paper must be written in an advanced undergraduate seminar (1000-level). The seminar must be among the approved area studies courses listed in Appendix B of the Latin American Studies Concentration Guide, and will count as one of the ten courses required for the concentration. Research papers will typically be 20-30 pages in length and must be approved by the Concentration Advisor. Students who choose this option do not take LAST 1990 or 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. Qualifed 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.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsrch_public.P_Main).
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

Adult human beings have the ability to speak and understand at least one language. And while languages can vary considerably, all are intricate, complex, rule-governed systems. Humans use language with little or no conscious awareness of the underlying system(s) that they have (unconsciously) learned, and which enables them to communicate and interact with others. Linguistic theory seeks to understand the nature of these systems: the sound systems (phonetics and phonology), the grammatical and meaning systems (syntax and semantics), and the interactions of these. The field addresses a variety of further questions including: How do these systems interact with communicative goals (pragmatics and discourse analysis)? How are these systems acquired by children (child language acquisition)? How do people actually produce and understand sentences in real time (language processing)? What are the neural systems underlying speaking and understanding (neurolinguistics)? How do the systems change over time, and how do these changes interact with and illuminate language structure (historical linguistics)? How do people use these systems for social identity (sociolinguistics)? How does language interact with culture (anthropological linguistics)? Fields as diverse as anthropology, legal reasoning, language pathology, technical writing and editing, speech recognition, automatic machine translation, and natural language user interfaces all rely heavily upon methods and models developed in linguistics.

The linguistics concentration at Brown is designed to give students a background in the basic "core" areas concerned with the structure of language (phonetics, phonology, syntax, and semantics) and to allow students to concentrate more heavily in these areas of theoretical linguistics and/or to build on these areas to concentrate on areas such as child language acquisition, language processing, neurolinguistics (among others). Other areas such as historical linguistics or applications of linguistic theory to the study of the structure of various languages can also be pursued in conjunction with offerings in other departments. The electives (listed below) include a number of courses in related departments, and the breadth of the field offers students flexibility in designing their concentration.

Requirements (10 courses)

Prerequisite Course (1)

- CLPS 0030 (LING 0030) Introduction to Linguistic Theory (formerly COGS 0410) (may be waived in special instances).

Required courses (4)

- CLPS 1310 (CLPS 1310) Introduction to Phonological Theory (formerly COGS 1210)
- CLPS 1330 (CLPS 1330) Introduction to Syntax (formerly COGS 1310)

One additional course in phonetics, phonology, syntax, or semantics. Any of:

- CLPS 1340 (LING 1340) Introduction to Semantics (formerly COGS 1110)
- CLPS 1341 (LING 1341) Lexical Semantics (formerly COGS 1120)
- CLPS 1342 (LING 1342) Formal Semantics (formerly COGS 1130)
- CLPS 1320 (LING 1320) The Production, Perception and Analysis of Speech (formerly COGS 1230)
- CLPS 1381 (LING 1381) Topics in Phonology (formerly COGS 1630)
- CLPS 1380 (LING 1380) Topics in Syntax and Semantics (formerly COGS 1640)

One course in psycholinguistics. Any of:

- CLPS 1800 (LING 1800) Language Processing (formerly COGS 1410)
- CLPS 1810 (LING 1810) Syntactic Theory and Syntactic Processing (formerly COGS 1420)
- CLPS 1650 (LING 1650) Child Language Acquisition (formerly COGS 1430)
- CLPS 1890 (LING 1890) Laboratory in Psycholinguistics (formerly COGS 1450)
- CLPS 1820 (LING 1820) Language and the Brain (formerly COGS 1480)
- CLPS 1385 (LING 1385) Topics in Child Language Acquisition (formerly COGS 1740)

Electives (5)

The remaining five courses may be drawn from any of those courses listed above, or from the following courses in Linguistics and related disciplines, with the restriction that only 2 may be below 1000-level courses. The listings here are not exclusive of the possible electives; students should consult with the concentration advisor about the appropriateness of other courses.

- CLPS 0810 The Biology and Evolution of Language (formerly COGS 0320)
- CLPS 0800 Language and the Mind (formerly COGS 0450)
- CSCI 1460 0870 Introduction to Computational Linguistics
- ANTH 1800 Sociolinguistics, Discourse and Dialogue
- ENGL 1210 History of the English Language
- HISP 1210C History of the Spanish Language
- PHIL 1760 Philosophy of Language
- SLAV 1300 Sociolinguistics

Courses above the 1000-level from other departments dealing with the history and structure of a language may also qualify with the consent of the advisor. At least three of these courses must be at the 1000-level

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Degrees with Honors (12 Courses)

Candidates for Honors in Linguistics will take a minimum of 10 courses for the concentration which will consist of all requirements for the standard program plus 2 additional courses in Linguistics or related disciplines. One of these courses may be an independent study project upon which the thesis is based. Honors candidates should formalize their projects in consultation with their advisors by the end of Semester 6.

Although no specific grade-point average has been set for acceptance into the Honors Program, only students with a good record and an advisor willing to work with them will be allowed into the Honors Program.

Independent Study

Independent study is encouraged for the A.B. degree. Students should sign up for CLPS 1970 (formerly COGS 1980) with a faculty advisor who is a member of the Department of Cognitive and Linguistic Sciences. Arrangements should be made in Semester 6 for students expecting to do independent study during Semesters 7 and/or 8.

Comments:

Foreign language courses will generally not count towards the concentration requirements, except those which 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.

It is strongly recommended that students take CLPS 1310 and CLPS 1330 before Semester 7.

Literary Arts

The concentration in Literary Arts is designed to allow students to develop their skills as writers in one or more genres while deepening their understanding of the craft of writing. A degree in Literary Arts does not guarantee that a student will become a great writer. Its purpose, rather, is to allow students to learn about writing as a literary art. While some students may place primary focus on a particular genre, others may explore the relations between genres. The requirements of the concentration balance creative and critical concerns. Students complete four creative writing workshops and six reading-intensive courses in literary criticism and history. These requirements are intended to encourage students to deepen their understanding of the issues related to the interpretation of literature and the art of writing.

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:
   LITR 110, 210, 310, 610, 1010, 1110, and 1150; at least two genres must be covered within the four courses taken. An independent study in literary arts (LITR 1310) 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 Art. 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. No more than a total of four classes (workshops or reading/research courses) may be taken outside of the Literary Arts Program at Brown (whether at another institution or within another department's curriculum). 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 Program from the first day of the fall semester to 20 September. Interested students should obtain information from the office of the Literary Arts Program.

Marine Biology

Standard program for the Sc.B. degree

Marine biology encompasses the study of living organisms in the ocean or other marine or brackish bodies of water. Marine life is a vast resource, providing food, medicine, and raw materials. At a fundamental level, marine life helps determine the very nature of our planet. Marine organisms contribute significantly to the oxygen cycle, and are involved in the regulation of the earth's climate. The habitats studied by marine biology are diverse and may include coral reefs, kelp forests, tide pools, muddy, sandy and rocky bottoms, and the open ocean.

It is understood that the biology of marine organisms and other organisms (including humans) are linked in very fundamental ways, with interfaces in every sphere of ecology.

In this program, students take a broad range of courses germane to understanding marine systems, and are encouraged to obtain hands-on research experience at Brown or marine field stations elsewhere. The field experience is a key feature of this program and provide scholarly interaction with leaders in the field so that students are mentored at the cutting edge.

The Marine Biology concentration prepares students for careers in marine and coastal ecology, environmental science, conservation research and education, even medicine.

Requirements:
1. CHEM 0330; PHYS 0030, 0040; MATH 0090, 0100 (or equivalents).

2. Two additional courses in physics, chemistry, mathematics, applied mathematics, computer science, engineering, or geological sciences, as approved by advisor.

3. Seven courses in biology: i) Four from the following: BIOL 0410, 0420, 0510, 0800, 1180, 1440, 1880; ii) and three additional biology courses: highly recommended are BIOL 0200, 0470, 0480, 0500, 1180, 1310, 1410, 1420, 1460, 1470; ENVS 0490.

4. Two out of the following group of related science courses (or substitutions as approved by the concentration advisor): CSCI 0040; GEOL 0070, 0310, 1100, 1110, 1120, 1130, 1240, 1330, 1580; CHEM 0350, 0360; an approved course in statistics.

5. Directed Research: BIOL 1950/1960, conducted at Brown or an approved marine lab or field station. A summer or semester at a field station is recommended. Please note that some recommended courses are offered every other year; others have limited enrollment and require early sign-up.

### Mathematical Economics

Designed to give a background in economic theory plus the mathematical tools needed to analyze and develop additional theoretical constructions. Emphasis is on the abstract theory itself.

#### Course Requirements:

1. **Economics:**
   - a. ECON 1130 (or 1110 with permission)
   - b. ECON 1210
   - c. ECON 1630
   - d. At least three other 1000-level economics courses. Of these three courses, at least two must be chosen from the "mathematical-economics" group. This group comprises ECON 1170, 1465, 1470, 1640, 1750, 1759, 1810, 1850, 1860, and 1870.

2. **Mathematics:**
   - a. At least two calculus courses through MATH 0180 or its equivalent
   - b. Linear algebra (MATH 0520 or 0540)
   - c. Either option A or option B as follows:
     - Option A is MATH 1610, MA 1620, plus one course from the "advanced mathematics" group (see below).
     - Option B is APMA 1650, plus two courses from the "advanced mathematics" group (see below).

The "advanced mathematics" group comprises MATH 1010, 1110, 1120, 1130, and 1140.

### Mathematics

Concentrators in mathematics should complete the prerequisites by the end of their sophomore year. Those interested in graduate study in mathematics are encouraged to take MATH 1130, 1140, 1260, 1410, and 1540. It is strongly recommended that students take MATH 1010 before taking MATH 1130.

#### Standard program for the A.B. degree

**Prerequisites**

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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- CSCI 0320
- CSCI 0510
- Advanced Mathematics
  - Three 1000-level Mathematics courses.
- Advanced Computer Science
  - Three advanced courses in Computer Science. 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. 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.
- Additional Courses
  - Four courses different from any of the above:
    - Three 1000-level courses chosen from Mathematics, Computer Science, Applied Mathematics, or related areas. These must be approved by a concentration advisor.
    - A capstone course in Computer Science or Mathematics: 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.

Medieval Cultures

The concentration in Medieval Cultures exists as one of two concentrations sponsored by the Program in Medieval Studies. The concentration focuses on the eighth through the fifteenth centuries, combining interdisciplinary perspectives on this period with depth of study in one or two disciplines. One traditional area of study is Western Europe, but students are encouraged to work in other cultural areas such as Byzantine, Islamic, Judaic and Slavic. 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.

Honors 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 Medieval 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.

Late Antique Cultures Track

Late Antique Cultures exists as an optional track of the Medieval Cultures concentration. Late Antique Cultures focuses on the third through ninth centuries C.E., when ancient cultural forms were still in place but medieval cultures were beginning to take shape simultaneously. Organized to facilitate the study of human activity in all its variety, unrestricted by the conventional demarcations of classical and medieval studies, the concentration serves those students who are interested in the changing relations of the many kinds of cultural forms, social patterns, political and economic forms, and artistic and literary traditions in this transitional period.

Requirements:

1. Two courses, one each in Roman history (CLAS 1310 or 1320; 1320 is recommended over 1310) and in medieval history (HIST 1030 or 1040).

2. One course at the advanced level (numbered at least 1000) in one approved language; 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.

3. Six other courses drawn from appropriate offerings and with the approval of the concentration advisor. These courses should support a concentrational area of special interest.

Honors in Late Antique Cultures 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

The Middle East encompasses a diversity of cultures. It includes the lands where the first cities were built and the earliest writing system was developed, the same lands where the three monotheistic religious traditions – Islam, Judaism and Christianity – flourished. The region has always been a crossroads for states and empires, networks of trade and intellectual discourse. Therefore we define it beyond traditional geographic parameters, which tend to focus on the Arab world, North Africa, Iran and Turkey. The concentration approaches the study of the Middle East of the 21st century as a global phenomenon, one that has generated diasporic communities throughout the world as well as transnational Islamic and other religion-based movements. The Middle East is integral to the making of global socio-economic networks, political discourses and the histories of colonialism and empire. While the contemporary popular media focus on the Middle East of late modernity, the concentration promotes the study of the region through a long-term perspective from antiquity to the present day. As an interdisciplinary concentration, Middle East Studies integrates diverse methodological approaches drawn from a variety of disciplines.

The concentration is designed to provide a broad knowledge of the region as well as a comparative understanding of Middle Eastern cultures, societies, states and economies. Within the concentration, students can choose from the following three focus areas:
I. Religions and Cultures: This focus area largely – although not exclusively – prioritizes pre-modern and early modern cultures and religions in the lands of the Middle East. Grounded primarily in the humanities, courses engage in an ongoing genealogy of the major cultural formations and religious traditions through the work of ethnographers, archaeologists, historians, sociologists, theologians, historians of science, literary critiques and numerous other realms of scholarship. Topics covered in relevant coursework vary widely, ranging from Arabic literature to the history of Syriac Christianity to the medieval pilgrims of the Holy Land.

II. Modern Politics and Society: This focus area centers on issues that have been particularly salient in the colonial and post-colonial periods of the countries and peoples from the region and practicing its major faiths. Relevant coursework examines the formation of political regimes, the development of nationalist and supra-nationalist ideologies such as Arab nationalism or Islamism, and sectarian movements and identity formation, as well as regional conflict and accommodation in the modern and contemporary periods.

III. Economies and Resources: Water, oil, cultural patrimony: From the Petra artifacts adorning RI Hall to the diesel that powers emergency generators which keep experiments running during winter storms, this university is intimately linked to the resources and economic logics that help to make the lands of the Middle East an object of academic study. Coursework in this focus area centers on two possible trajectories, including the economics of heritage practices (i.e., tourism to archaeological sites) or economic development and underdevelopment in the region (i.e., the political economy of oil, labor, water and other resource flows).

All concentrators are required to fulfill seven courses in addition to the language competency requirements for a total of eleven courses:

1. One course in a major religious tradition (i.e., Christianity, Islam, Judaism);

2. One course on the history of the Middle East. (Note: Students whose coursework deals primarily with the ancient or pre-modern periods, are strongly encouraged to take a modern history course while students whose coursework deals primarily with the modern period are strongly encouraged take an ancient or pre-modern history course);

3. Three focus area courses (the list of eligible courses for each focus area is available at the Middle East Studies website: http://www.watsoninstitute.org/middleeast/); and

4. Two electives, including any two courses from any focus area in the concentration or independent studies approved by the MES director. (Note: Language courses beyond the requirements are eligible).

5. Language competency: Intermediate competency in a Middle Eastern language (i.e., Arabic, Aramaic, Egyptian, Farsi, Hebrew, Hindi-Urdu, Turkish), or four semesters of language coursework in the same language, is required. The requirement may be met by successfully passing courses in the given language at the intermediate level at Brown or another institution. Students wishing to fulfill this requirement on the basis of study outside of Brown are required to pass a competency test administered by an authorized Brown faculty member as listed on the MES website. Students who complete the language requirement in fewer than four courses – whether at Brown or elsewhere – are required to take courses equivalent to the number of language courses they do not need to fulfill. These may include more advanced language courses, courses in a second language, or courses from any of the three focus areas.

Capstone Project

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All concentrators are required to complete a capstone project. Students undertake the project in conjunction with one or more faculty members with interests in the Middle East. The project may take the form of an undergraduate honors thesis, an independent study project, or with permission, an enhanced final project for a regularly scheduled course.

Concentration Colloquium

All concentrators are required to attend the annual concentration colloquium at which students who have completed a capstone project make a presentation related to that project. The colloquium is held during spring semester.

Honors

Students may graduate with Honors in Middle East Studies by completing an undergraduate Honors thesis under the supervision of a primary reader drawn from the Middle East Studies faculty and one additional reader from the Brown or Brown-affiliated faculty. Honors students must increase the number of courses in the concentration to twelve, of which two course credits (i.e., one thesis credit course and one elective course) may be devoted to the preparation of the thesis.

Study Away from Brown:

Up to two courses taken at educational institutions other than Brown may be credited toward the concentration upon approval of the concentration advisor. All students must provide a syllabus and samples of written work before the MES Director can review coursework taken at other institutions for approval. For languages courses taken abroad, students may provide evaluation forms or transcripts instead of written work for review by an appropriate language instructor at Brown.

Double Concentrators:

Up to two courses may be cross-listed with another concentration in order to qualify for a double concentration in Middle East Studies. All concentration proposals are subject to review by the Middle East Studies Concentration Advisor. Students are expected to submit their concentration proposals no later than two weeks before the end of the preregistration period in their sophomore year.

Modern Culture and Media

The Modern Culture and Media concentration combines the study of contemporary theories of representation and cultural production with the analysis of diverse texts – visual and verbal, literary and historical, archival and imaginative – in the period broadly designated as “modern” (18th to 21st centuries). Since the appearance of modern means of textual production and reproduction (print, film, video, sound recording, digital practices, etc.), traditional artistic and literary forms have changed significantly and new forms have been developed. MCM pursues teaching and research premised on the centrality of these changes to the analysis of modern culture. We may study the modern media or on the canonical texts of the humanities, but we examine all texts as elements in cultural systems that influence and organize textual production and reception at any moment in history. Our work always aims at better understanding ourselves as participants in and products of an international, mass-mediated culture.

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
Track I consists of 11 courses.

1. Three core courses:
   a. MCM0150
   b. Two of the following: MCM0100, MCM0230, MCM0240, MCM0250, MCM0260, MCM1110. No more than three courses from this list may count for concentration requirements.
   c. The remaining two must be at any level in MCM above MCM0260

2. Five additional courses, of which
   a. one must be an upper level course numbered MCM1200
   b. two must be senior seminars (MCM1500 or MCM1700)
   c. The remaining two must be at any level in MCM above MCM0260

3. Three additional courses. These courses may be in MCM or in related departments. 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 concentration 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, and so on. 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 all Track I concentrators. Of the 11 courses required for concentration, as many as 3 may be in production. These may be in the production courses offered by MCM (film, video, digital media) or 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: Students who qualify for Honors in Track I are eligible to apply to do an Honors project or thesis. Applications will be screened by the MCM Honors Committee. (Application forms should be obtained by prospective honors students in the 7th semester. They are available in the MCM office.) If approved, a student must then register for MCM1990, a one-credit thesis course in which they complete the Honors project.

Track II consists of 11 courses:

1. Two courses (chosen with the advisor to reflect the student’s production interest): a. MCM0100 or MCM0150
   b. Introductory Practice Course (for example: MCM0710, MCM0730, MCM0750, VISA0100, VISA0110, VISA0120, MUSC0200, CSC10150, LITR0110, LITR0210) or History of a Medium or Practice (for example: HIA0010, TAPS0030, MUSC0010, or MUSC0040)

2. One additional course from the following: MCM010, MCM0150, MCM0230, MCM0240, MCM0250, MCM0260.

3. Three 1000-level theory courses in Modern Culture and Media approved by advisors. One must be MCM1500.

4. Four practice courses selected in consultation with an advisor. Courses can be in any medium or combinatorial 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.)

5. One senior seminar: MCM1700 Seminars in Production or other equivalent in production.

Honors: Honors in Track II entails one additional course, generally an independent study (MCM1990 Honors Thesis Project). Enrollment in this course is approved upon acceptance of an Honors Proposal. Application forms must be submitted by prospective Honors students in the beginning of the seventh semester and are available in the MCM office. The course is taken in the student’s final semester. An Honors degree reflects not only the completion of the thesis course and project, but generally distinguished performance in the concentration.

Music

The A.B. offered by the Music Department is a general degree, integrating theory, history, ethnomusicology, technology, composition and performance in a single, liberal concentration. There are currently three tracks within the concentration: one that emphasizes theory, history and composition; another that emphasizes ethnomusicology; and a third that focuses on computer music and multimedia.

MUSC 0550 and 0560 are required for all three tracks. These courses should be taken in the first year if possible; they must be completed by the end of the sophomore year. (N.B. The sequence starts in the fall.) The basic keyboard skills expected of concentrators are tested at the end of MUSC 0560.

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 0550-0560 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, Jazz Combos, Electroacoustic Ensemble, Sacred Harp/Shape-Note Singing, Old-time String Band, Javanese Gamelan, or Ghanaian drumming.

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
All music courses -- including performance courses -- are open to all Brown students, provided that they have satisfied the prerequisites.

**Concentration Requirements:**

**Traditional Track:**

**Music Theory (2)**

MUSC 0550-0560 are prerequisites for any upper-level music courses, 0550 is offered every fall; 0560 is offered every spring.

- MUSC 0550: Theory of Tonal Music I
- MUSC 0560: Theory of Tonal Music II

**History (2)**

Any two of the three courses below are required; the third is optional.

- MUSC 0910: Medieval and Renaissance Music
- MUSC 0920: Baroque and Classical Music
- MUSC 0930: Romantic and Modern Music

**Advanced Theory (2)**

Any two advanced theory courses are required (in no particular order). 1020 and 1030 are usually offered every other fall, as are 1040 and 1050.

- MUSC 1020: Modal Counterpoint
- MUSC 1030: Tonal Counterpoint
- MUSC 1040: Advanced Music Theory I - Chromaticism and Advanced Tonal Techniques
- MUSC 1050: Advanced Music Theory II - Theories of Music since 1890

**Advanced Musicianship (1)**

MUSC 1010-1011 are required; each is worth 1/2 credit. (Prerequisite: 0560) 1010 is offered every fall; 1011 is offered every spring.

- MUSC 1010: Advanced Musicianship I
- MUSC 1011: Advanced Musicianship II

**Ethnomusicology (1)**

MUSC 1900 is a concentration requirement. 1900 is usually offered annually and should be taken before the senior year.

- MUSC 1900: Introduction to Ethnomusicology

**Electives (3)**

Three upper-level courses are required (i.e., no course below MUSC 0570); 1600-level seminars are preferred. Up to two full Applied Music or ensemble credits (i.e., four semesters) may be applied to the concentration requirements.

**Ethnomusicology Track:**

**Music Theory (2)**

MUSC 0550-0560 are prerequisites for any upper-level music courses, 0550 is offered every fall; 0560 is offered every spring.

- MUSC 0550: Theory of Tonal Music I
- MUSC 0560: Theory of Tonal Music II

**Other Foundational Courses (2)**

The two courses below are required. 1900 is usually offered annually and should be taken before the senior year.

- ANTH 0100: Cultural Anthropology - Understanding Human Societies
- MUSC 1900: Introduction to Ethnomusicology

**History (2)**

Any two of the three courses below are required; the third is optional.

- MUSC 0910: Medieval and Renaissance Music
- MUSC 0920: Baroque and Classical Music
- MUSC 0930: Romantic and Modern Music

**Electives in Ethnomusicology (4)**

Four additional courses in ethnomusicology numbered 1000 or higher are required. For a list of qualifying courses, see the Concentration Advisor.

**Computer Music and Multimedia Track:**

**Music Theory (2)**

MUSC 0550-0560 are prerequisites for any upper-level music courses, 0550 is offered every fall; 0560 is offered every spring.

- MUSC 0550: Theory of Tonal Music I
- MUSC 0560: Theory of Tonal Music II

**Computer Music Foundation (3)**

- MUSC 0200: Computers and Music
- MUSC 1200: Seminar in Electronic Music -- Recording Studio as Compositional Tool
- MUSC 1210: Seminar in Electronic Music -- Real-Time Systems

**Musicology/Ethnomusicology Elective (1)**

One scholarly course numbered above MUSC 0900.

**Other Electives (4)**

Students must take four elective courses selected in any combination from the following groups:

- Computer Music and Multimedia courses, MUSC 1220–1290 or MUSC 2220–2290
- Theory and composition courses, MUSC 1020–1190
- No more than one lower-level Computer Music and Multimedia course, MUSC 0210–0230
- No more than one electronic art production course (VISA or MCM) from approved list (see the Concentration Advisor for current approved courses in this area)

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Neuroscience

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: MATH 0090, 0100; PHYS 0030, 0040; BIOL 0200; CHEM 0330, 0350. The core concentration courses are NEUR 0010, 1020, 1030, one neuroscience lab course, one critical reading course, one statistics course, and four electives related to neuroscience. Independent study and honors research projects are encouraged.

Philosophy

There is one concentration program in Philosophy, with two optional tracks.

Standard Concentration: Eight courses in philosophy, which may not include more than one course numbered below 0350. They must include at least one course in each of the following five areas: ancient philosophy (0350, 1250, 1260 or 1310), early modern philosophy (0360, 1700, 1710, or 1720), Logic (0540 or higher), ethics or political philosophy (0500 or higher), and epistemology or metaphysics (1660, 1750, or 1770). In addition, at least one of the courses must be an undergraduate or graduate seminar.

Optional tracks:

Ethics and Political Philosophy: Eight courses in philosophy, which may not include more than one course numbered below 0350. They must include a course in ancient philosophy (0350, 1250, 1260 or 1310), a course in early modern philosophy (0360, 1700, 1710, or 1720), and a course in logic (0540 or higher). They must also include at least three courses in ethics or political philosophy at the level of 0400 or higher.

Logic and Philosophy of Science: Eight courses in philosophy, which may not include more than one course numbered below 0350. They must include a course in ancient philosophy (0350, 1250, 1260 or 1310), a course in early modern philosophy (0360, 1700, 1710, or 1720), a course in logic at the level of 1630 or higher, and a course in epistemology or metaphysics (1660, 1750, or 1770). They must also include at least three courses in philosophy of science at the level of 0650 or higher. With the approval of the concentration advisor, two appropriate science or mathematics courses may be taken instead of philosophy courses.

Cross-listed courses may be used to fulfill the requirements of any of the concentrations above only with the approval of the concentration advisor.

Honors

Seniors wishing to earn honors by presenting a senior honors thesis should consult their concentration advisor during their sixth semester concerning procedures and requirements. In addition to completing the usual non-honors requirements, a student must write a thesis judged to be of honors quality by two readers and have a strong record in philosophy department courses (of which at least five must be taken for a letter grade). Honors theses are usually written during a student's final semester at Brown.

Physics and Philosophy

The Physics and Philosophy A.B. Concentration is for undergraduates who have a deep interest in understanding physics but do not need to acquire the laboratory and computational skills of a professional physicist. It acquaints students with the most philosophically interesting physics and balances the student's need to grapple with some computational problems with their need to deepen their investigation of conceptual and epistemological issues. By the end of the program, students are expected to possess an excellent conceptual understanding of the most philosophically interesting physics, relativity and quantum mechanics. They should be able to discuss the central interpretational issues in physics.

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 (e.g., PHYS 1170 - Elementary Particle and Nuclear Physics, PHYS 1280 - Cosmology, PHYS 1510 – Classical Field Theory, PHYS 1100 – General Relativity, etc.). This requires another 1000-level physics course in the concentration. 1000-level Physics courses cannot be taken without certain preliminary work, most importantly, PHYS 0470, which serves as a prerequisite for most higher-level physics courses and which relies in turn on PHYS 0160 or PHYS 0060. Another lower-level physics course is necessary for a student to develop familiarity with the tools which have been employed in producing the physics knowledge.

A natural introduction into philosophy of physics comes from a course in Early Modern Philosophy. To a large extent, Early Modern Philosophy was shaped by scholars who combined interest in philosophy and physics (e.g., Rene Descartes, Blaise Pascal, Gottfried Wilhelm Leibniz). The influence of the XVII century physics revolution on other central figures such as Kant is unquestionable. Early Modern Philosophy sets an intellectual stage for many subsequent
developments in the Philosophy of Physics and directly addresses some of the most perplexing issues like the connection (or lack thereof) between physics and religion. The core of the Philosophy requirement involves two courses in Epistemology, Metaphysics and Philosophy of Science. One course in this field would not be sufficient due to its very broad nature. Students are strongly advised to take a relevant History course. This requirement can be substituted by an additional philosophy course to reflect interests of those students who want a deeper background in Epistemology, Metaphysics and Philosophy of Science or have other related interests such as Ancient Natural Philosophy.

In addition to the above philosophy courses, PHIL 0210 (Science, Perception, and Reality) serves as a gateway into the concentration. It may be substituted by other relevant courses such as PHYS 0100 (Flat Earth to Quantum Uncertainty: On the Nature and Meaning of Scientific Explanation).

A course in calculus is a prerequisite for most physics and some philosophy classes.

Required courses for the A.B. degree are listed below:

Physics Courses:

An introductory course in Modern Physics:

- PHYS 0060 - Foundation of Electromagnetism and Modern Physics or
- PHYS 0160 - Introduction to Quantum Mechanics and Relativity.

A course in Special Relativity and Classical Field Theory:

- PHYS 0470 - Electricity & Magnetism.

A course in Methods of Experimental and Theoretical physics:

- PHYS 0500 - Advanced Classical Mechanics or
- PHYS 0560 - Experiments in Modern Physics.

A course in Quantum Mechanics and its applications:

- PHYS 1410 - Quantum Mechanics; or
- PHYS 1530 - Thermodynamics & Statistical Mechanics.

One more 1000-level Physics course;

Philosophy Courses:

A gateway course:

- PHIL 0210 - Science, Perception, and Reality or

A course in Early Modern Philosophy:

- PHIL 0360 - Early Modern Philosophy,
- PHIL 1700 - British Empiricists,
- PHIL 1710 - 17th Century Continental Rationalism, or
- PHIL 1720 - Kant: The Critique of Pure Reason.

Two courses in Epistemology, Metaphysics and Philosophy of Science:

- PHIL 1310 - Myth and the Origins of Science,
- PHIL 1590 - Philosophy of Science,
- PHIL 1610 - Philosophy of Relativity Physics,
- PHIL 1620 - Philosophy of Quantum Mechanics,
- PHIL 1630 - Deductive Logic,
- PHIL 1660 - Metaphysics,
- PHIL 1670 - Time,
- PHIL 1750 - Epistemology, or
- PHIL 1850 - Philosophical Logic.

History Courses:

One more Philosophy course or a course in History of Science:

- HIST 1140 - Nature, Knowledge, and Power in Early Modern Europe,
- HIST 1180 - The Rise of the Scientific Worldview,
- HIST 1190 - Nineteenth-Century Roots of Modern Science, or
- HIST 1200 - Science and Society in the Twentieth Century.

A course in Calculus:

- MATH 0180 - Intermediate Calculus,
- MATH 0200 - Intermediate Calculus, or
- MATH 0350 - Honors Calculus.

A final project:

- PHIL 1990 - Senior Thesis,
- PHYS 1990 - Senior Conference Course, or
- PHIL 1920/PHYS 1920 - Senior Seminar

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.

Physics

Standard concentration for the A.B. degree

PHYS 0070, 0160 (or 0030, 0040 or 0050, 0060), 0470, 0500, 0560, 1410, 1530 and one additional 1000-level course or a mathematics course beyond the introductory level.

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Prerequisites: PHYS 0070, 0160 (or 0050, 0060); MATH 0190, or 0090, 0100.
Program: PHYS 0470, 0500, 0560, 1410, 1420, 1510, 1530, 1560, 1980. One additional science course, chosen from PHYS 0720, 1170, 1280, 2410, or upper level courses in related fields of science chosen by the student with agreement of his or her advisor. Mathematics: four (4) courses beyond 0190 or 0090, 0100 including choices from Applied Mathematics. In addition, courses in computer programming are recommended.

A senior thesis is required. This is to be prepared in connection with PHYS 1990 under 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.

Honors

Candidates for honors in physics will be expected to pursue a more rigorous and extensive program than those merely concentrating in the subject. In addition they will be required to begin an honors thesis during the seventh semester and to complete it (as part of PHYS 1990) during the eighth semester. Honors candidates are also expected to take a special oral examination on the thesis at the end of the eighth semester. Further details about the program may be obtained from the chair of the department or the departmental honors advisor.

Astrophysics Track for the Sc.B. degree

Eighteen courses are required. 
Prerequisites: PHYS 0070, 0160 (or 0050, 0060), PHYS 0270; MATH 0170 and 0180, or MATH 0190 and 0200, or MATH 0350 (or equivalent); PHYS 0470.
Program: MATH 0520, 0540, or PHYS 0720; and APMA 0330 and 0350, or APMA 0340 and 0360, or MATH 1110 or MATH 1120. PHYS 0500, 0560, 1410, and 1530. Three of the following courses: PHYS 1100, 1250, 1270, or 1280; and two additional 1000- or 2000-level courses in physics or a related field which are not listed as requirements.

A senior thesis is required. This is to be prepared in connection with PHYS 1990 under 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.

Biological Physics Track for the Sc.B. degree

Required Courses: Foundations of Physics-PHYS 0070 or 0050 or ENGR 0040; PHYS 0160 or 0060; PHYS 0470; PHYS 0500; PHYS 1410; PHYS 1530; PHYS 0720 alone or one of APMA 0330, 0350, or MATH 1110; combined with one of MATH 0160, 0200, 0350, 0520 or 0540. Basic Biology and Chemistry: BIOL 0200 (or placement out of BIOL 0200); BIOL 0500, and CHEM 0330. Advanced Biophysical Topics and Techniques: PHYS 1610 and PHYS 1990. Elective courses (four chosen from the following list, with at least two 1000-level courses, or additional courses approved by the concentration advisor): APMA 0360, 0410, 0650, 1070, 1080; BIOL 0280, 0470, 1050, 1130, 1200, 1270, 1870, 1940T; CHEM 0350, 0360; MATH 0090, 0170, 0190, 1610, 1620; PHYS 0560, 1510, 1560, 2620F.

A senior thesis is required. This is to be prepared in connection with PHYS 1990 under the direction of a faculty supervisor. The topic may be in a related department or of interdisciplinary nature. In any event, a dissertation must be submitted.

Mathematical Physics Track for the A.B. degree

Prerequisites: MATH 0090, 0100, or 0190; PHYS 0050 or 0070. The required mathematics courses are MATH 0180 or 0200 or 0350 and 0520 or 0540; 1110; and at least one of the following: 1060, 1120, 1610. The required physics sequence consists of PHYS 0060 or 0160; 0470; 0500; 0560; and at least two of the following: 1410, 1420, 1510, 1530, 1560. Concentrators are required to take at least one course in mathematics and one in physics in each of their last two semesters.

Mathematical Physics Track for the Sc.B. degree

Substantial completion of the A.B. requirements in mathematics and physics. Prerequisites: PHYS 0070, 0160 (or 0050, 0060), MATH 0190 (or 0090, 0100), 15 courses in mathematics and physics beyond the prerequisites including a senior thesis. Students should consult with the Physics Concentration Advisor regarding their specific course choices.

Political Science

Political science concentration offers opportunities for learning in a number of different areas. Students completing the program of study will be prepared for jobs in government, private corporations, and nonprofit organizations as well as for more advanced study in law, business, or graduate school.

The undergraduate concentration is organized around three broad tracks, or programs of study: American politics, international and comparative politics, and political theory.

Requirements

Students interested in graduating with a degree in political science need to complete the following requirements:

1. Twelve courses overall: Ten within the Department of Political Science and two from areas outside the department related to your chosen track. Thirteen courses are required if the methods requirement is fulfilled with a course outside the department.

2. For the American politics and political theory tracks; two introductory courses from the following group: POLS 0010, 0100, 0110, 0200 or 0400. One of which must be the introductory course associated with chosen track.

For the international and comparative politics track; two introductory courses are required: POLS 0200 and 0400.

3. One course in each of the American politics and political theory subfields. Two courses in the international and comparative politics subfield.

4. Three upper-level courses, beyond the introductory course, in the chosen subfield.

5. One methods course from Political Science POLS 0500 or 1600. A comparable course from an outside department (ECON 1620, 1630 APMA 0650, EDUC 1110, or SOC 1100 may also be used). If the methods requirement is fulfilled by an outside department course, it will not count as one of the 12 required courses.

6. One research seminar from the POLS 1820, 1821, 1822 or 1823 offerings that is track related.

7. Two upper-level courses from outside the department related to the specialized track, chosen with the approval of the concentration advisor. Appropriate 1000-level courses offered in (but not limited to) Africana Studies, American Civilization, Anthropology, Classics, Economics, History, International Relations, Philosophy, Public Policy,
Religious Studies, Sociology or Urban Studies may apply. The concentration advisor may approve a course from another department if it clearly meets the intent of the outside course requirement.

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 1920 during the senior year.

Portuguese and Brazilian Studies

The concentration in Portuguese and Brazilian Studies is the study of the Portuguese-speaking world, a large and diverse geographical and cultural area spread over five continents, including Brazil, Continental and Insular Portugal, Lusophone Africa and Luso-America, and inhabited by two hundred million people. Although students are encouraged to explore the global nature of the Portuguese-speaking world, their individual program will generally focus on one of the specific geographical areas mentioned above.

Using the Portuguese language as a basis, the concentration in Portuguese and Brazilian Studies allows students to develop their interests in the areas of language, literature, education, history or the social sciences in general. The concentration consists of eight interrelated courses to be selected by the student, in consultation with the Concentration Advisor, from the offerings in Portuguese and Brazilian Studies as well as in other departments, such as History, Political Science, Africana Studies, Anthropology and Sociology. At least four courses must be conducted in Portuguese. The prerequisite for the concentration is POBS 0400 or the equivalent. Students may choose between two basic programs:

**Program A (Language and literature focus):** (1) POBS 0610 (Mapping Portuguese-Speaking Cultures: Brazil) and 0620 (Mapping Portuguese-Speaking Cultures: Portugal and Africa); (2) At least two literature courses at the POBS 1500 level or higher; (3) An advanced writing course (POBS 1030 or 1320); (4) POBS 1800 (Concentration Seminar); (5) Two electives, at least one of which should be a course outside the field of language and literature.

**Program B (Interdisciplinary focus):** (1) POBS 0610 (Mapping Portuguese-Speaking Cultures: Brazil) and 0620 (Mapping Portuguese-Speaking Cultures: Portugal and Africa); (2) POBS 1800 (Concentration Seminar); (3) Five courses to be selected from the offerings in Portuguese and Brazilian Studies and/or related departments, such as Africana Studies, Anthropology, History, Political Science, and Sociology.

**Honors**

Candidacy for honors in Portuguese and Brazilian Studies assumes a better than average record, particularly in the concentration. Candidates for honors are required to complete an honors thesis or other approved project. Normally honors candidates will register for POBS 1990 ("Research and Preparation of Honors Projects") in Semesters VII and VIII. These independent study units may not be used to satisfy the minimum course requirement for the concentration. Honors projects are evaluated by two faculty members. Detailed information on honors is available from the concentration advisor.

**Foreign Study:** Study either in Brazil or in Portugal (usually in the junior year or during the summer) is encouraged as an important part of the concentration. Up to four credits from participation in foreign-study programs can be applied towards the concentration. Students should begin to prepare early for participation in such programs.

**Psychology**

For students who wish to concentrate in Psychology, the Department offers both A.B. and Sc.B. programs. Concentrators take advantage of a wide range of course options, including courses in the major sub-disciplines of psychology (perception and cognition; personality, social, and developmental; and comparative/physiology psychology), quantitative methods, laboratory techniques, and senior seminars on specialized topics. One of the hallmarks of the undergraduate program in Psychology at Brown is close collaboration between undergraduates and faculty members. Qualified undergraduates may work as teaching assistants with faculty members. Students also have the opportunity to conduct independent research under the supervision of one of the faculty members in the department. Many concentrators choose to enter the Honors program, in which students work on a research project with a professor on a one-to-one basis for a full year. Honors students collaborate with their faculty advisor in all stages of the research process, from designing an experiment, to collecting and analyzing data, to writing a thesis, and giving an oral presentation on the research project.

**Concentration Requirements**

**Introductory Psychology:** Planning a concentration and choosing elective courses requires general knowledge about the topics psychologists study. Introductory Psychology (CLPS0010) is required for the concentration. Students may satisfy the Introductory Psychology requirement by submitting AP (score of 4 or 5) or IB (score of 5 or above) test credit or by transferring Introductory Psychology course credits from other 4-year institutions.

**Quantitative:** Careers in Psychology and related fields require familiarity with statistics. Therefore, the Psychology concentration requires Quantitative Methods in Psychology (CLPS0900). CLPS0900 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 for AP Statistics, regardless of score. Students who feel that COGS0900 is too easy can complete APMA 1650 for concentration credit.

**Course Distribution:** Concentrators must take at least one laboratory course, which provides students with hands-on experience with research methods in a substantive area of psychology. Because the laboratory serves as the basis for independent research and is a prerequisite for the Honors program, concentrators should plan to take their lab before their senior year. This course must be taken in CLPS. Independent study or laboratory courses in other departments will not fulfill this requirement.

**Advanced Seminar:** Both A.B. and Sc.B. concentrators are required to take one advanced limited-enrollment seminar/critical readings course. The list of approved seminars varies yearly. Contact one of the concentration advisors for details.

**AP and Transfer Credits:** Students receiving AP credit for Introductory Psychology can place out of CLPS0010, and can enroll directly in higher-level psychology courses. AP credits are not accepted for other concentration requirements. Students transferring from another college or university, or students studying abroad or at another US institution, may receive transfer credits for other concentration requirements.

Please refer to our departmental policy on applying AP and transfer credits.
The A.B. degree requires 12 courses. The Sc.B. degree requires 17 courses. (Concentrators should complete either the A.B. or Sc.B. Concentration Worksheet before meeting with their Concentration Advisor.)

Requirements for A.B. and Sc.B. Concentrators

1. CLPS0010 (or advanced placement with a score of 4 or 5, or transfer credit) is required. If placement for CLPS0010 is granted on the basis of AP or IB test scores, then another CLPS course (at any level) must be substituted.

2. CLPS0900 (quantitative methods) is required.

3. Six courses are required, two in each of the following areas: Perception & Cognition, Comparative/Physiological, and Social/Personality/Developmental. The pre-approved courses in each area are listed on the concentration worksheets. A laboratory course or seminar (indicated on the worksheet) may be used to meet the area requirement only if it is the student’s second lab course or second seminar. Independent study courses cannot be used for this requirement. First year seminars outside of CLPS cannot be counted for the area requirement.

4. An advanced laboratory course. These include: CLPS1090, CLPS1092, CLPS1190, CLPS1191, CLPS1192, CLPS1193, CLPS1194, CLPS1290, CLPS1490, CLPS1491, CLPS1492, CLPS1510, CLPS1690, CLPS1790, and CLPS1791. The worksheets include up-to-date lists of labs. Independent study courses and laboratory courses outside of CLPS cannot be used to satisfy this requirement.

5. An advanced seminar/critical readings course in CLPS, numbered above 1000. Consult one of the concentration advisors for lists of approved courses.

Requirements Specific to the A.B. Concentration

6. Two elective courses, with approval of the concentration advisor. The electives should complement the student’s main area of interest in Psychology. These courses can be taken outside of CLPS. Only courses that carry concentration credit in the home department can be used for this requirement. In addition, independent study and GISP courses will not fulfill this requirement.

Requirements Specific to the Sc.B. Concentration

6. Six supporting science courses selected from at least three of the following areas, with the prior approval of the Sc.B. Concentration Advisor: applied mathematics, biomedical sciences, chemistry, computer sciences, engineering, linguistics, mathematics, neuroscience, or physics. At least one course must be from either biomedical sciences or neural sciences. (Some courses offered by science departments, such as those intended for nonscience concentrators, may not meet this requirement). AP credit can substitute for only one of these courses.

7. Directed Research (CLPS1980). CLPS1980 typically involves one semester of independent research under the direct supervision of a faculty advisor in Psychology. This includes data collection and/or analysis, and a final written report. Upon department approval, the faculty advisor may be from another department or unit. The proposal form for CLPS1980 must be submitted before the student can register for CLPS1980. Contact the Sc.B. Concentration Advisor for further details. CLPS1980 cannot be counted for the lab requirement.

The CLPS Undergraduate Concentration Committee oversees the concentration and receives petitions regarding concentration requirements.

Honors

Detailed information about the Psychology Honors program is available on a dedicated page.

Public Policy and American Institutions

Public Policy and American Institutions focuses on the formation, implementation and evaluation of solutions to social, economic, and political problems in the United States. Among the policy areas covered are education, health care, urban welfare, law, technology, race, and gender. Students may choose to specialize in a specific substantive area of public policy on policymaking and policy analysis more generally.

Requirements:

1. Core courses required of all concentrators (five courses): POLS 0100; ECON 1110 or 1130 (or EDUC 1130); POLS 1600, ECON 1620 or 1630, EDUC 1110, or SOC 1100; POLS 1050 or PPAI 1700T; POLS 1200 or EDUC 1160.

2. Additional requirements (five courses): (1) at least three courses in political institutions, one of which must be in comparative institutions; (2) two courses in public policy problems, preferably in the student’s area of specialization.

3. One of the five required courses listed above in 2) must be from the list of Public Policy 1700/1701 Junior/Senior Seminars.

4. Honors: Candidates for honors should apply in the Spring term of their third year. Successful candidates will enroll in the Public Policy Colloquium and prepare a senior honors paper.

The concentration offers two tracks.

Law and Public Policy offers students a contemporary, interdisciplinary view of the legal system. This track is open to all interested students and is not intended as preparation for law school. The track requires the five core courses of the concentration, a comparative institutions course, and one course in policy problems. Additionally, this track requires two courses in legal institutions, one multi-disciplinary perspectives course related to law, and either PPAI 1700T or PPAI 1700N.

Economics and Public Policy focuses on the economic analysis of governmental programs. It requires the five core courses of the concentration and at least three courses in political institutions, one of which must be in comparative institutions. In addition, the track requires ECON 1480 and two courses in economic policy problems.

Religious Studies

Concentration in religious studies includes course work in RELS 1000 (junior seminar in methods in the study of religion) and eight other courses conforming to the following requirements.

Each student in consultation with appropriate faculty members devises a concentration program, which may include up to three courses given

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
outside the department. The student presents (for approval by the concentration advisor) a written statement of the objectives of his or her concentration program and a list of the component courses. The program is expected to encompass the study of at least one religious tradition from each of the following groups. Ordinarily, this requirement is satisfied by two or more courses in each of these areas:

1. Traditions that emerge from West Asia and the Mediterranean world
2. Traditions that emerge from South and East Asia

The plan of study will take account of more than one approach to the study of religions, e.g., philosophical and historical; contain at least two Intermediate-level courses (0200-0999), RELS 1000, and two additional advanced-level courses (above 1000). This means that no more than four courses (out of nine) can be at the introductory-level.

No later than the end of spring registration in the junior year, concentrators will determine if they wish to write an honors thesis or choose a capstone course for the concentration. A capstone course will be selected in consultation with the concentration advisor and other faculty as appropriate. Within the frame of this capstone course, the concentrator will address in an appropriate way the theoretical and interpretive issues of his or her particular focus in the Religious Studies concentration.

Honors:

A Religious Studies concentration with Honors requires, in addition to RELS 1000 and eight other courses, an Honors thesis (RELS 1999, during both semesters of the senior year). To receive Honors, a student must have at least a high B in the concentration and an A on the thesis. Students who study abroad, or who petition to include Brown courses not cross-listed with Religious Studies, must still complete at least five courses in Religious Studies.

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. The late fourteenth through the late eighteenth centuries saw the development of new cultural and political forms through the imitation and reworking of those of classical antiquity, while later witnessing the restructuring of patriarchal society and the emergence of the sovereign nation state. These four hundred years were marked by scientific and agricultural revolutions, the Reformation, the development of capitalism, and their attendant social philosophies, and the rise of cultural forms such as the novel, opera, Grub Street journalism, and the art market. Europe’s “encounter” with the Americas (North and South), as well as its ongoing shifting relationship with Asia and Africa, also produced new and complex forms of society, culture, and political organization.

Courses relevant to the Renaissance and Early Modern Period are offered through a variety of academic units within the University. 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.

Students should contact the director of the program to discuss courses which are approved for the concentration in Renaissance and Early Modern Studies.

Science and Society

The Science and Society Concentration is an interdisciplinary concentration offered by the Faculty Committee on Science and Technology Studies (http://www.brown.edu/Faculty/COSTS). This concentration examines the processes of scientific discovery and the establishment of scientific policies and systems of belief from historical, philosophical, anthropological and sociological perspectives.

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 1400: Science and Society: Theories and Controversies, 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

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
Slavic Studies

The Department of Slavic Languages offers standard and honors programs in Slavic studies. This concentration integrates study of the languages, literatures, and civilizations of the Slavic world. Built on sound knowledge of one or two Slavic languages, the program allows students to develop an in-depth appreciation and understanding of the East European cultures and civilizations on which they are primarily focused through a broad spectrum of interdisciplinary fields at Brown. All concentrators are strongly encouraged to study abroad in a Slavic country, either during the academic year or the summer. Students can enroll in the Brown-in-St.-Petersburg summer program and the Brown-in-Prague semester program. Brown also has approved exchange programs in Moscow, Petersburg, Prague, and Yaroslavl.

Requirements

1. 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.

2. Seven 1000-level courses devoted to the study of the East European civilizations: literature, history, culture, theater, political science, economics, international relations. Typically, at least four of these courses will be from within the Department of Slavic Languages. Students’ choice of courses is subject to the approval of the concentration advisor.

Honors

Honors candidacy in Slavic studies assumes an excellent academic record, particularly in the concentration. Additional requirements are the same as those for a standard concentration, plus the writing of a senior thesis (SLAV 1990). For procedures and schedule for writing a senior thesis, please refer to the department guidelines.

Sociology

The Sociology concentration exposes students to some of the most important issues in the social sciences: international development and globalization, inequality in the United States and the global south, the environment and environmental change, the social organization of health and medicine, the self and society, and contemporary cities and urban problems. In addition, the concentration features a strong set of courses in the areas of statistics, methodology, and social theory. Sociology is an especially appropriate concentration for students who seek to develop their critical and analytical skills. These skills will allow them to continue to graduate or law school, if they so desire, or to take positions in a variety of fields in the private, non-profit, and public sectors.

Ten courses are required:

Five required courses:

a. One introductory course: SOC 0010 Perspectives on Society or SOC 0020 Perspectives on Social Interaction.
b. SOC 1010 Sociological Theory.
c. SOC 1020 Methods of Social Research.
d. SOC 1100 Introductory Statistics for Social Research (or an equivalent).
e. SOC 1950 Senior Seminar (this is a capstone seminar).

Five optional courses:

a. At least three of the optional courses have to be 1000-level courses and one of them a senior seminar.
b. Students can choose to take up to two (showcase?) lower level (0100-level) courses.
c. Students can petition to take a course outside of the concentration (this will be allowed only when the proposed course makes sense given the interests of the student, and there is no equivalent sociology course).

The Capstone Experience

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
Sociology requires all concentrators to conduct a capstone project in their senior year. The purpose of the capstone project is to allow students an opportunity to apply the knowledge they acquired on a project of their own interests. This capstone project provides a hands-on experience through which students learn what can be done with Sociology. To fulfill the capstone requirement students have to take Soc. 1950 – Senior Seminar during the senior year. Participation in this seminar allows each cohort of concentrators to discuss their diverse interests and exposes them to the wide range of applications of Sociological knowledge. The capstone project can take many forms, including honors theses, and other traditional and alternative projects as described below.

The capstone project can be a one semester research paper on a topic of your interest. Alternatively, you can design a different type of independent project. Below is a list of suggestions for possible capstone projects.

- Doing a one semester research project on a topic of interest.
- Working with a faculty member in an Odyssey program to design a new course.
- Producing a video ethnography on a topic of your interest.
- Assisting in organizing an academic conference.
- Producing a photographic exhibit on a sociological issue.
- Interning in a community or private sector organization or a policy agency and reflecting sociologically on your experience.
- Using sociological analysis to write Engaging in public sociology, using sociological analysis to write journalistic articles and op-ed pieces or an internal evaluation or a policy report for an organization.

You should decide your capstone project in consultation with the concentration advisor and the instructor of the Senior Seminar. You may also need to approach a specific faculty 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 capstone project and listing your advisor for the project.

**Honors**

The honors program in Sociology offers an excellent opportunity for students who seek to pursue independent and original research during their senior year. Acceptance into the honors program requires a grade of "A" in at least one half of all sociology courses. Honors students must write a thesis under the guidance of two sociology faculty members, an advisor and a reader. In addition, they must enroll in SOC 1950 (Senior Seminar) and SOC 1980 and 1990 (Senior Honors Thesis) in order to develop the substantive integration of the concentration studies, and to prepare the thesis (with the advisor's consent, students may substitute other courses for those listed above).

**South Asian Studies**

Students who concentrate in South Asian Studies should emphasize one or several aspects of this broad field. They may work primarily in a given chronological period (e.g. ancient, medieval, early modern or contemporary) or in a given geographical area (e.g. Bangladesh, Bengal, Maharashtra, North India, Pakistan, South India, Sri Lanka) or in a given discipline (e.g. anthropology, Hindi/Urdu, history, religion, or Sanskrit) but should also take courses in areas outside their chosen area of emphasis. The aim is to gain facility in using the approaches and methodologies of multiple disciplines for a better and broader understanding of historical and contemporary complexities of South Asian nations and cultures. Courses are available or can be arranged in economics, literature, philosophy, political science, and theatre arts, as well as the core disciplines mentioned above. Each student should work out a coherent course of study in consultation with one or more members of the South Asia faculty listed below. Courses that allow the student to write a major paper on a topic related to South Asia may be included in those needed to fulfill the concentration requirement.

**Course Requirements**

All South Asian Studies concentrators must take and pass 10 courses as approved by their concentration advisor.

**Language Requirements**

Proficiency in a South Asian language is required for the concentration (proficiency being determined by either taking two years of Hindi/Urdu or of Sanskrit or by successfully passing a special examination in either language). Four courses taken to fulfill the language requirement may be counted among the eleven additional courses required.

These should include:

- HIST 1580 The Making of South Asia

At least one of the following courses in pre-modern history, philosophy, religious studies and literature:

- CLAS 0180 Indian Civilization through Its Literature
- CLAS 0810 Religious and Philosophic Thought in Ancient India
- CLAS 0820 Epics of India
- CLAS 0830 Classics of Indian Literature
- CLAS 0840 Classical Philosophy of India
- CLAS 0990 Concepts of Self in Classical Indian Literature
- HIST 1590 Beyond Hindu, Muslim: Recovering Early South Asia
- RELS 0140 Introduction to Indian Religions
- RELS 0130 Introduction to Hinduism

At least one of these social science courses:

- ANTH 1250 Film and Anthropology: Identity and Images in Indian Societies
- ANTH 1321 Impact on Colonialism: Gender and Nationalism in India
- ANTH 1131 Peoples and Cultures of India
- ANTH 2321 Coming to Terms with India
- POLS 1280 Politics of India

At least one course in the visual arts, modern literature, music, cinema, or theatre of South Asia such as:

- COLT 1410J The Partition of India in Fiction and Film: A Literature of Trauma
- HIAA 0060 Introduction to Indian Art
- HIAA 1410A Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent
- HNDI 1080 Advanced Hindi-Urdu
- MUSC 1933 The Music of India
- PRSN 1200 Iranian Cinema: Before and After the Islamic Revolution

For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).
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- RELS 0910 Music, Drama, and Religion of India
- TSDA 1270 Non-Western Theatre and Performance

An Honors Thesis or a Capstone Course taken in an appropriate Department

Five electives, two of which may be language courses in Hindi/Urdu or Sanskrit taken in conjunction with the language requirement.

If course rotations or the introduction of new courses warrant, substitutions within these categories may be made with approval of the faculty advisor.

Language Requirements

Proficiency in a South Asian language is required for the concentration. Students who are not native speakers of a South Asian language may prove proficiency by taking two years of Hindi/Urdu or Sanskrit at Brown, by successfully passing a course at the intermediate (4th semester) level at Brown or the approved equivalent at another institution, or by successfully passing a special examination administered by an approved faculty member. Two courses taken to fulfill the language requirement may be counted among the elective courses required for concentration.

Study Abroad

All South Asian Studies concentrators are encouraged to take Hindi/Urdu and to participate in Brown in India, a junior-year study abroad program at St. Stephen’s College and Lady Sri Ram College in Delhi. Students can also opt to enroll in any other Brown approved study-abroad program in South Asia.

Capstone Project

All concentrators other than honors concentrators will designate an upper-level course in the area of their primary focus as their capstone course. The student will take this course during the senior year and will produce as part of the written work for the course a substantial paper or annotated translation displaying the unique focus of his or her concentration.

Honors

A South Asian Studies Concentration with Honors requires a high B or A average in courses taken for the concentration as well as an honors thesis in the department of the student’s main focus. Candidates for the honors program should apply to the South Asia Faculty Group through their advisor by the middle of their sixth semester.

The following is a list of possible South Asian courses. This list is not exhaustive, as any class which allows the concentrator to complete a substantial final project on South Asia may be counted towards the concentration requirements. Classes marked by an asterisk (*) are either sections of special topics courses still in the course catalogue or are offered irregularly. Check current course listings on Banner for more information.

- ANTH 1311 Impact on Colonialism: Gender and Nationalism in India (Fruzzetti)
- ANTH 2320 Ideology of Development (Fruzzetti)
- ANTH 2321 Coming to Terms with India (Fruzzetti)
- CLAS 0180 Indian Civilization through Its Literature (Fitzgerald, Scharf)
- CLAS 0810 Religious and Philosophic Thought in Ancient India (Fitzgerald, Scharf)
- CLAS 0820 Epics of India (Fitzgerald)
- CLAS 0830 Classics of Indian Literature (Fitzgerald, Scharf)
- CLAS 0840 Classical Philosoply of India (Fitzgerald, Scharf)
- CLAS 0990 Concepts of Self in Classical Indian Philosophy (Scharf)
- *COLT 1410J The Partition of India in Fiction and Film: A Literature of Trauma
- *COLT 1420Z Post-Colonial Narratives: Fiction, Memoir, and Theory
- *COLT 1421C Subaltern Studies: History, Literature, Theory
- DEVL XXXX (Several courses in Development Studies are potentially appropriate; check to see if the course allows for a South Asian focus)
- ECON 1520 The Economic Analysis of Institutions (Munshi)
- *HIAA 0060 Introduction to Indian Art
- *HIAA 1410A Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent (Bond)
- *HIST 0970V Gandhi’s Way (Zamindar)
- *HIST 1971L History of Islamic Law: Theory and Practice (Akari)
- *HIST 1440 Islamic History 1400-1800 (Akari)
- HIST 1580 The Making of Modern South Asia (Zamindar)
- HIST 1590 Beyond Hindu, Muslim: Recovering Early South Asia (Zamindar)
- *HIST 1950B European Empires in the East (1500-1800): A Comparative Analysis (Flores)
- *HIST 1950E Europe and the Indian Ocean 1500-1800 (Flores)
- *HIST 2971A Science in a Colonial Context
- INTL 1800J Identity, Rights, and Conflict (Nesiah)
- INTL XXXX (Several other courses in International Relations are potentially appropriate; check to see if the course allows for a South Asian focus)
- HNDI 0100 Beginning Hindi or Urdu (Koul)
- HNDI 0200 Beginning Hindi or Urdu (Koul)
- HNDI 0300 Intermediate Hindi-Urdu (Koul)
- HNDI 0400 Intermediate Hindi-Urdu (Koul)
- HNDI 1080 Advanced Hindi-Urdu (Koul)
- MUSC 0041 World Music Cultures (Middle East and Asia) (Perlman)
- *MUSC 1933 Music of India (Perlman)
- *PHIL 0090 Philosophy East and West
- POLS 1280 Politics of India (Varshney)
- POLS 18210 Politics of Economic Development in Asia (Varshney)
- POLS 0210 Understanding Radical Islam
- POLS 1380 Ethnic Politics and Conflict (Cook)
- POLS 1430 Roots of Radical Islam
- PRSN 0010 Basic Persian (Anvar)
- PRSN 0020 Basic Persian (Anvar)

For complete, up-to-date course information please see the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwkcsearch_public_P_Main).
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Theatre Arts and Performance Studies

The Department of Theatre Arts and Performance Studies offers three tracks within its concentration: Theatre Arts, Performance Studies, and Writing for Performance. Each track has classes that overlap with the other tracks. Each track requires 10 courses to fulfill the concentration requirements. Each track culminates in a collective senior seminar in which concentrators work with advisers to present a culminating project, as well as explore possibilities for careers in their area of study after graduation.

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. 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.

Of the ten courses required, at least four must be in theatre history and dramatic and theatrical theory that forms a backbone for further study in these areas. Students should take at least one course that exhibits geographic or topical breadth beyond what might loosely be called “mainstream” Euro-American tradition. Basic courses in technical theatre and design are required of all students, as is a senior seminar, taken by most students in their seventh semester. The remaining three courses for the concentration may be taken in areas of applied theatre arts (though this is not a requirement); there are sequences of courses available in acting/directing, playwriting, design/technical theatre, and dance.

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

1: TSDA 0230 Acting/Directing
2: TSDA 0250 Technical Production of Plays
3: TSDA 1230 Performance Theory: Ritual, Play and Drama in Context
4: TSDA 1240 Performance Historiography and Theatre History
5: TSDA 1250 Twentieth-Century Western Theatre and Performance
6: One course in Dramatic or Performance Literature, Theory, History and/or Criticism offered or cross-listed in the department *
7: Either TSDA 0220 or any dance history or practice course. *
8-9: Two electives to be selected from applied areas and/or from relevant theoretical and text-based studies throughout the university. *
10: TSDA 1520 Senior Seminar

* At least one course in the mix of a concentrator's elective requirement’s (6, 7, 8, 9) should demonstrate enhanced geographical breadth.

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,
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Speech and Dance 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 two 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

1: TSDA 1230 Performance Theory: Ritual, Play and Drama in Context
2: TSDA 1240 Performance Historiography and Theatre History
3-5: Three of the following, one of which must show geographical breadth:

- TSDA 1250 Twentieth-Century Western Theatre and Performance
- TSDA 1270: Non-Western Theatre and Performance
- TSDA 1330: Dance History: The 20th Century
- TSDA1280N: New Theories for a Baroque Stage
- TSDA 1281H: Black Diaspora, Dance and Vernacular Embodiments
- TSDA1280T: Contemporary Mande Performance
- TSDA 1380: Mise en Scene
- TSDA 1430: Russian Theatre and Performance
- TSDA 1610 Political Theatre of the Americas
- TSDA 1610: Performativity and the Body: Staging Gender, Staging Race
- TSDA 1640: Theatre and Conquest
- TSDA 1650: 21st Century American Drama
- TSDA 1670: Latino Theatre and Performance
- TSDA 1690: Performance, Art, and Everyday Life
- TSDA 2120: Revolution as a Work of Art
- AFRI 0990: Black Lavender: Black Gay/Lesbian Plays/Dramatic Constructions in the American Theatre
- AFRI 1110: Voices Beneath the Veil
- AFRI 1120: African American Folk Traditions and Cultural Expression

6-7: Two full credit courses based in performance craft in either Acting, Directing, Speech, Dance, Design, Literary Arts (with a performance emphasis), Visual Arts or Music. These classes must be approved by the concentration advisor.

8-9: Two additional courses in the academic study of performance and performance culture(s) to be culled from those listed above as well as other courses in the Department of Theatre Arts and Performance Studies or throughout the university in consultation with advisor. An extensive list of courses that might be considered Performance Studies can be made available to interested students

10: TSDA 1520 Senior Seminar

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 theater 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

ecology, sharing space with orature, acting, scenography, ethics, and all fields that focus attention, invoke fascination, and alert the will to the possibilities of transformation.

Ten courses are required: A minimum of two writing-skills classes relevant to live performance; a writing or composition class outside of live performance (literature, screenplay, computer programming, video editing); a technical production class; a performance-based class; TAPS 1230 and 1250; one elective drawn from inside or outside the department that broadens the cultural and disciplinary reach of the track, for example concerning the study of social phenomena from a scientific, philosophical, or political perspective (chosen in consultation with an advisor); senior seminar.

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.

For all concentrators, regardless of track:

In cases where dual concentrations are declared, the Department allows two courses to be counted toward both concentrations.

Required Courses

1: One writing course from the following:

- TAPS 0060 Introduction to Playwriting Workshop
- TAPS 0100 Playwriting I

2: One Course from the following:

- AFRI 1050A, D, E RPM Writing
- LITR 0610A S01 Unpublishable Writing
- LITR 1150Q S01 Reading, Writing, Thinking for the Stage
- LITR 1010C Advanced Playwriting
- LITR 1150S What Moves at the Margin
- TAPS 0200 Playwriting II
- TAPS 1500 series (A-Z)

3: One writing/composition class outside of playwriting:

- LITR 1010B S01 Advanced Poetry
- LITR 1010D S01 Advanced Electronic Writing
- LITR 1010G S01 Cave Writing
- TAPS 1280F Introduction to Set Design

4: Other courses to be approved by advisor:

- TAPS 0250 Technical Production of Plays

5: One performance-based class. Options include Acting, Directing, Speech, Dance, Visual Arts, Music, or Sign Language.

6-7: Two classes in theatre and performance history:

- TAPS 1230 Performance Theory: Ritual, Play and Drama in Context
- TAPS 1250 Twentieth-Century Western Theatre and Performance

8-9: Two additional Theater/Performance History/Theory classes:

For complete, up-to-date course information please see or the Brown Course Search tool (https://selfservice.brown.edu/ss/hwwksearch_public_P_Main).
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For complete, up-to-date course information please see the Banner Schedule (http://selfservice.brown.edu/menu).

- TAPS 1240 Performance Historiography and Theatre History
- TAPS 1270 Performance in the Americas
- TAPS 1330 Dance-History: The 20th Century
- TAPS 1280N New Theories for a Baroque Stage
- TAPS 1281H Black Diaspora, Dance and Vernacular Embodiments
- TAPS 1280T Contemporary Mande Performance
- TAPS 1380 Mise en Scene
- TAPS 1400 Advanced Performance
- TAPS 1420 Global Queer Performance
- TAPS 1430 Russian Theatre and Performance
- TAPS 1440 Seminar on Selected Figures
- TAPS 2120 Revolution as a Work of Art
- TAPS 2200A Abstraction and Resistance
- TAPS 1610 Political Theatre of the Americas
- TAPS 1610 Performativity of the Body
- TAPS 1640 Theatre and Conquest
- TAPS 1650 21st Century American Drama
- TAPS 1670 Latino Theatre and Performance
- TAPS 1690 Performance, Art, and Everyday Life
- AFRI 0990 Black Lavender
- AFRI 1110 Voices Beneath the Veil
- AFRI 1120 African American Folk Traditions and Cultural Expression

10: TAPS 1520 Senior Seminar

For all concentrators, regardless of track:

In cases where dual concentrations are declared, the Department allows two courses to be counted toward both concentrations.

Honors:

The standard pattern above, plus an honors thesis (TSDA 1990), the topic of which would be determined before Semester VII. Candidates for the honors program should have an outstanding academic record and should apply to the Department by Semester VI.

Further Aides to Successful Concentration Experiences:

Capstone Experiences:

The tracks come together in several courses but also in a culminating senior seminar. In addition to the senior seminar there are a wide variety of ways students who concentrate can construct a “capstone” experience—such as directing a production, a solo performance, a dance piece, an honor’s thesis, or a design project.

Urban Studies

The Urban Studies Program focuses on urban phenomena through the approaches of different disciplines, thus providing an interdisciplinary context in which to understand various dimensions of urban life and the urbanization process. Although the program provides sufficient flexibility to allow students to pursue specific interests without being overly bound by requirements, it is designed so that there is a basic core content to the program of study. Within that, students can follow one of three focus areas, mix and match, or design their own focus. The program is structured to ensure that each student will undertake two or more research or fieldwork projects, as part of their course work as an undergraduate. The primary aim of the program is to contribute to a broad, liberal education. Its purpose is to satisfy the needs of those students who are interested in urban phenomena but do not feel well served by the existing departmental programs in a single discipline.

For a concentration, the program requires ten courses selected from four course groups:

1. Introduction (one course): URBN 0210 or POLS 0220.

2. Research Skills (one course): ECON 1620; EDUC 1110; POLS 1600 or SOC 1100. 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.

3. Basic Curriculum (total of 6 different courses required):

a. Core Courses: Three courses required (covering 3 of the 7 core areas: American Civilization, Economics, History, History of Art and Architecture, Literature, Political Science, and Sociology) selected from among: AMCV 1520, 1530; COLT 1810C; ECON 1410; ENGL 0800A; HIAA 0700, 0840, 0850, 0860, 0900, 1850D; HISP 1500C; HIST 1820, 1830; POLS 0220, 1320; SOC 1330, 1640; URBN 1200.

b. Seminar Courses: (3 courses required). The courses provide opportunities to undertake research or fieldwork projects and all qualify as “capstone” experiences. AMCV 1903E; EDUC 1650; ENGL 1760F, 1760K; ETHN 1870A; HIAA 1910A; HIST 1974F, 1974T; POLS 2220; URBN 1000, 1010, 1420, 1870A, 1870D, 1870E, 1870F, 1870N, 1870I, 1870J, 1870M, 1870N.

4. Complementary Curriculum (two courses required):

a. Any course(s) listed in groups 1 and 3 above, and not used to fulfill this requirement.

b. Any of the following from recent listings of courses around the University: AFRI 0600, 0620; AMCV 0150I, 1611A, 1612D, 1912A; ARCH 0400, 1150, 1200F, 1600, 1900, 2020B, 2040A; COLT 1810H, 2820; EDUC 1150; ENGL 0200K, 1710I; ENGN 1930S; ENVS 1410, 1700A, 1920; ETHN 1890A; GEOL 1320; GRMN 1660B; HIAA 0020, 0490, 0550, 0560, 1200D, 1560C, 1850C; HIST 1540, 1670, 1972V; POLS 1310; PPAI 1200, 1700J, 1700Q, 1700R; SOC 0130, 1270, 1540, 1871F. Other options may be available with approval of the concentration advisors.

c. RISD courses approved by the Urban Studies Program each semester as applicable to the Urban Studies concentration. 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 towards the concentration if the material covered directly corresponds to that taught in Brown courses, or is relevant to the complementary curriculum. Such courses will be approved each semester by the concentration advisor.

5. Honors Candidates for Honors must apply to the Director of the Program in letter form by the middle of the second semester of their junior year. They must include a brief statement of the intended research proposal required for honors, 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. They must also arrange for a second advisor/reader. Honors candidates must maintain a high grade record. Twelve courses are required of an Honors concentrator, two in
addition to the ten courses required for a standard program. These two courses may be either one research skills course and one thesis preparation (one independent reading and research - URBN 1970, one semester course), or two thesis preparation (URBN 1970, two semesters). The candidate's thesis and course record must be of outstanding quality, in order to qualify for honors.

Possible Focus Areas: To help guide students in the basic curriculum, we list courses that belong to three broad focus areas. Students need not follow these areas and are encouraged to "mix and match" or develop their own focus. The basic curriculum is divided between core and seminar courses. The latter all provide students with opportunities to carry out research and fieldwork projects and all qualify as "capstone" experiences. The focus areas are:

**Literature and Arts:** AMCV 1611A; COLT 1810C; ENGL 0800A, 1760F, 1760K; HIAA 0700, 0840, 0860, 0900, 1850D; HISP 1500C; URBN 1870A.

**Social Sciences:** AMCV 1520, 1530, 1903E; ECON 1410; EDUC 1650; HIST 1820, 1830; POLS 0220, 1320; SOCI 1640; URBN 1000, 1200, 1420, 1870J, 1870M.

**Urban Built Environment:** AMCV 1520, 1530, 1903E; ECON 1410; HIAA 0700, 0840, 0850, 1850D, 1910A; HIST 1820, 1830; URBN 1000, 1010, 1200, 1870D, 1870E, 1870F, 1870N.

Total number of courses: 10 (concentration) 12 (honors)

**Visual Art**

This concentration, directed toward the practice of art, is broadly based in the studio areas of 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 give them skills in critical thinking. Students are encouraged to develop their own direction and to cultivate an informed and thoughtful individual perspective.

The concentration program consists of twelve courses.

**Introductory Course Requirements** (3 courses)

1. VISA 0100 Studio Foundation, or VISA 0110 Advanced Studio Foundation, and VISA 0120 Foundation Media, per class of 2011. VISA 0100 and VISA 0110 do not count as one of the 7 studio concentration requirements; VISA 0120 does count towards the requirements. VISA 0100 or VISA 0110 are prerequisites for all studio courses.

2. HIAA 0010, Introduction to the History of Art and Architecture, or HIAA 0020, Introduction to the History of Architecture and Urbanism or HIAA 0030, Foundations of Western Art in Antiquity. (Unless waived these courses are concentration requirements.)

**Concentration Program Requirements**

1. VISA 1110 Drawing I (will be counted as one of the 7 studios).

2. Seven studio courses; a minimum of four studio courses must be taken at Brown University.

3. One upper-level History of Art and Architecture course.

4. HIAA 0880 or 0890, Contemporary Art I or II. Encouraged to be taken by the first semester of junior year.

5. Elective (one course): which shall be in either History of Art and Architecture, Visual Art, Modern Culture and Media, approved related courses or RISD courses.

6. Senior Thesis Exhibition: which does not carry academic credit, is required for graduation (usually presented during the seventh or eighth semester).

**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 ten 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.