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Introductory Notes

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of Arts and Sciences

Courses of Instruction, 2012–2013

June 1, 2012

About this Catalog

The University reserves the right to withdraw or modify courses of instruction at any time. Review of academic, financial, and other considerations leads to changes in the policies, rules, and regulations applicable to students, and the Faculty of Arts and Sciences therefore reserves the right to make changes at any time. These changes may affect such matters as tuition and all other fees, degrees and programs offered (including the modification or possible elimination of degrees and programs), degree and other academic requirements, academic policies, rules pertaining to student conduct and discipline, fields or areas of concentration, and other rules and regulations applicable to students.

While every effort has been made to ensure that this catalog is accurate and up-to-date, it may include typographical or other errors. Changes are regularly made to this online catalog.

If you are unable to access the material contained in the Catalog, contact the Accessible Education Office, 1350 Massachusetts Avenue, Holyoke Center 486, Cambridge, Massachusetts 02138. V: 617-496-8707; V/TTY 617-496-3720; or aeo@fas.harvard.edu.
Mike Burke, Registrar

Official Register of Harvard University (ISSN #0199-1787)

Published by the Office of the Registrar, Faculty of Arts and Sciences, 20 Garden Street, Cambridge, MA 02138.

Deans, Departments, and Committees

Dean of the Faculty of Arts and Sciences, Professor Michael D. Smith

Dean of Harvard College, Professor Evelynn M. Hammonds

Dean of the Graduate School of Arts and Sciences, Professor Richard Tarrant, Interim

Dean of the School of Engineering and Applied Sciences, Professor Cherry A. Murray

Dean of the Arts and Humanities, Professor Diana Sorensen

Dean of Social Science, Professor Peter V. Marsden

Dean of Science, Professor Jeremy Bloxham

Divisions

Continuing Education, Dean Michael Shinagel

Medical Sciences, Dean Thomas M. Roberts

Departments

The Department Chairs will be updated by July 1, 2012.

African and African American Studies

Anthropology

Astronomy
Celtic Languages and Literatures
Chemistry and Chemical Biology
The Classics
Comparative Literature
Earth and Planetary Sciences
East Asian Languages and Civilizations
Economics
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History of Art and Architecture
History of Science
Human Evolutionary Biology
Linguistics
Mathematics
Molecular and Cellular Biology
Music
Near Eastern Languages and Civilizations
Organismic and Evolutionary Biology
Philosophy
Physics
Psychology
Romance Languages and Literatures

Slavic Languages and Literatures

Sociology

South Asian Studies

Statistics

Stem Cell and Regenerative Biology

Visual and Environmental Studies

Standing Committees with Curricular Responsibilities

Standing Committee lists in the body of this catalog and the list below are based on preliminary information available for publication in Courses of Instruction. Final Committees as appointed by the President will be printed in October in the Harvard University Gazette and in the 2012-2013 General Catalog issue of the Official Register. Some Committee members hold administrative or research appointments rather than teaching appointments.

Undergraduate Degree Programs

Degrees in Chemical and Physical Biology, Professor Erin K. O’Shea, Chair

Degrees in Environmental Science and Public Policy, Professor Paul R. Moorcroft, Chair

Degrees in Folklore and Mythology, Professor Maria Tatar, Chair

Degrees in History and Literature, Professor Jill Lepore, Chair

Degrees in Neurobiology, Professor Venkatesh N. Murthy, Chair

Study of Religion, Professor Michael J. Puett, Chair

Degrees in Social Studies, Professor Richard Tuck, Chair

Special Concentrations, Professor Julie A. Buckler, Chair

Studies of Women, Gender, and Sexuality, Professor Afsaneh Najmabadi, Chair

Graduate Degree Programs

Degree of Doctor of Philosophy in Architecture, Landscape Architecture, and Urban Planning, Professor K. Michael Hays, Co-Chair, Professor Antoine Picon, Co-Chair
Higher Degrees in Biophysics, Professor James M. Hogle, Chair

Higher Degrees in Business Studies, Professor Kathleen McGinn, Chair

Degree of Doctor of Philosophy in Business Economics,
Professor Jerry R. Green, Chair

Degree of Doctor of Philosophy in Organizational Behavior,
Professor Jeffrey Polzer, Chair

Degree of Doctor of Philosophy in Science, Technology, and Management,
Professor Mihir A. Desai, Chair

Higher Degrees in Chemical Biology, Professor Daniel Kahne, Co-Chair, Professor Suzanne Walker, Co-Chair

Degree of Doctor of Philosophy in Chemical Physics, Professor Eric J. Heller, Chair

Higher Degrees in Dental Medicine, Professor Bjørn R. Olsen, Chair

Degree of Doctor of Philosophy in Health Policy, Professor Joseph P. Newhouse, Chair

Degree of Doctor of Philosophy in History and East Asian Languages, Professor Mark C. Elliott, Chair

Higher Degrees in Film and Visual Studies, Professor Eric Rentschler, Chair

Higher Degrees in the History of American Civilization, Professor Jennifer Roberts, Chair

Higher Degrees in Inner Asian and Altaic Studies, Professor Leonard W. J. van der Kuijp, Chair

Higher Degrees in Medical Sciences, Professor David E. Golan, Chair

Middle Eastern Studies, Professor Baber Johansen, Chair

Higher Degrees in Political Economy and Government, Chair to be determined.

Higher Degrees in Public Health Sciences, Professor Michael Grusby, Chair

Degree of Doctor of Philosophy in Biological Sciences in Public Health,
Professor Marianne Wessling-Resnick, Chair
Degree of Doctor of Philosophy in Biostatistics,
Professor Victor G. DeGruttola, Chair

Higher Degrees in Public Policy, Professor Robert N. Stavins, Chair

Degree of Master of Arts in Regional Studies—East Asia, Professor Michael Szonyi, Chair

Degree of Master of Arts in Regional Studies—Russia, Eastern Europe, and Central Asia, Professor Terry D. Martin, Chair

Higher Degrees in Social Policy, Professor Kathryn Edin, Chair

Higher Degrees in Systems Biology, Professor Timothy J. Mitchison, Co-Chair, Professor Andrew W. Murray, Co-Chair

Instructional Program Committees

Dramatics, Chair to be determined.

Freshman Seminars, Professor Jay M. Harris, Chair

General Education, Professor Edward J. Hall, Chair

Life Sciences, Professor Robert Lue, Chair

Medieval Studies, Professor Daniel Smail, Chair, Luis Girón-Negrón, Acting Chair, spring term

Mind, Brain, and Behavior, Professor Florian Engert, Co-Chair, Professor Gennaro Chierchia, Co-Chair, fall term, Professor Richard W. Wrangham, Co-Chair, spring term

Ukrainian Studies, Professor Michael S. Flier, Chair

Writing and Speaking, Chair to be determined.

Interdisciplinary Coordinating Committees

African Studies, Professor Caroline M. Elkins, Chair, Professor Lucie E. White, Acting Chair

Archaeology, Professor Michael McCormick, Chair

Council on Asian Studies, Professor Arthur Kleinman, Chair, Professor Michael J. Puett, Acting Chair, spring term

Ethnic Studies, Professor Kay K. Shelemay, Chair
European Studies, Professor Grzegorz Ekiert, Chair

Global Health and Health Policy, Professor David M. Cutler, Chair

Latin American and Iberian Studies, Chair to be determined.

Oceanography, Professor Eli Tziperman, Chair

Special Committees

Concentration in Chemistry and Physics, Professor Eric J. Heller, Chair
### Academic Calendar for Next Two Years

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<td>Freshman registration</td>
<td>Aug 20 (M)</td>
<td>TBA</td>
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<td>Aug 20 (M)</td>
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<tr>
<td>Academic year begins</td>
<td>Sep 4 (Tu)</td>
<td>Sep 3 (Tu)</td>
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<tr>
<td>(First meeting of fall term classes)</td>
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<tr>
<td>Holiday—Labor Day</td>
<td>Sep 3 (M)</td>
<td>Sep 2 (M)</td>
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<td>Study card day</td>
<td>Sep 11 (Tu)</td>
<td>Sep 10 (Tu)</td>
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<tr>
<td>Freshman study card day</td>
<td>Sep 11 (Tu)</td>
<td>Sep 10 (Tu)</td>
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<td>Holiday—Columbus Day (observed)</td>
<td>Oct 8 (M)</td>
<td>Oct 14 (M)</td>
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<td>Holiday—Veterans’ Day</td>
<td>Nov 12 (M)</td>
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<td>Thanksgiving recess</td>
<td>Nov 21 (W)–Nov 25 (Su)</td>
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<td>Fall reading period</td>
<td>Dec 5 (W)–Dec 12 (F)</td>
<td>Dec 4 (W)–Dec 11 (W)</td>
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<td>Fall term final examinations</td>
<td>Dec 13 (Th)–Dec 21 (F)</td>
<td>Dec 12 (Th)–Dec 20 (F)</td>
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<td>Winter recess begins</td>
<td>Dec 22 (Sa)</td>
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<td>Holiday—Martin L. King, Jr. Day (observed)</td>
<td>Jan 21 (M)</td>
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<td>Jan 28 (M)</td>
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<td>Feb 1 (F)</td>
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<td>May 2 (Th)–May 9 (Th)</td>
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<td>May 10 (F)–May 18 (Sa)</td>
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<td>Commencement</td>
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Explanation of Course Listings

Introductory Note

The Faculty of Arts and Sciences offers these courses to students registered in Harvard College and the Graduate School of Arts and Sciences. A student in good standing in any other School of the University may be admitted to courses by cross-registration. For information on cross-registration, please visit http://crossreg.harvard.edu.

Students are admitted to a course only if they have fulfilled all the requirements for that course as stated in this catalog, or by permission of the instructor. Requirements are usually stated as Prerequisites in the course descriptions.

Courses numbered in the 300s or 3000s are for graduate students only. Advanced Standing Students in their fourth year of residence, who are candidates for the master’s degree, may enroll in these courses with the signature of the instructor on their study cards.

Students registered in the Faculty of Arts and Sciences may enroll in most courses given by other faculties of the University. They also may take courses at the Episcopal Divinity School (graduate students only), the Fletcher School of Law and Diplomacy (graduate students only), and the Massachusetts Institute of Technology (including the Harvard–MIT Program in Health Sciences and Technology). For details on cross-registration procedures, undergraduates should consult Handbook for Students and graduates should consult The Graduate School of Arts and Sciences Handbook. Catalogs of the other faculties and institutions are available at Lamont and Widener libraries. The Harvard University on-line course catalogs containing course
descriptions, faculty information, and general information about classes at each school are available on the Internet at [https://coursecatalog.harvard.edu](https://coursecatalog.harvard.edu).

### Course Shopping and Enrollment Tool

The course Shopping and Enrollment Tool is available at the [http://my.Harvard.edu](http://my.Harvard.edu) portal for on-line course shopping and course selection. The Shopping Tool offers the ability to search for FAS courses using multiple course attributes. The Enrollment Tool provides the functionality to select courses for a term. To use the Shopping and Enrollment Tool, access the [http://my.Harvard.edu](http://my.Harvard.edu) portal by entering your ID Number and PIN.

### Explanation of Course Listings

Most courses are numbered with the following general scheme:

- 1–99 Primarily for Undergraduates
- 100–199 Undergraduates and Graduates
- 200–299 Primarily for Graduates
- 300–399 Graduate Courses of Reading and Research

Anthropology, Business Studies, Chemical Biology, Economics, Government, Health Policy, History, Psychology, Religion, and Studies of Women, Gender, and Sexuality courses have four-digit numbers. The following general scheme applies:

- 910–999 Primarily for Undergraduates
- 1000–1999 For Undergraduates and Graduates
- 2000–2999 Primarily for Graduates
- 3000–3999 Graduate Courses of Reading and Research

Unless otherwise specified, Graduate Courses of Reading and Research are half courses offered in both fall and spring terms.
A Capital letters designate elementary courses in language and composition; numerals
designate all other courses, with the number 1 (and not zero) as the lowest designation.

hf Half courses extending throughout the two terms of the academic year are designated
by hf immediately following the course number.

r Courses that may be repeated for credit are designated by an r immediately following
the course number.

* An asterisk before a course title indicates that the instructor must consent to a student’s
enrollment by signing the study card.

[ ] A course number and title enclosed in brackets indicate that the course is not being
offered during the current year. A note indicates when it will next be offered.

() A day enclosed in parentheses indicates that the course meets on that day only at the
discretion of the instructor.

Catalog Number: The four- or five-digit number below the course title is a course identification
number used for computer processing and on the study card. The following catalog numbers, not
listed elsewhere in this catalog, have been assigned for the special study opportunities of TIME
(for graduate students) and Independent Study (for undergraduates):

Independent Study 9999
TIME-C 8899
TIME-R 7700
TIME-T 8811
**Instructor Number:** In course listings of Graduate Courses of Reading and Research, each instructor’s name is followed by a four-digit identification number used for computer processing and on the study card.

**Examination Group:** Marked by the phrase EXAM GROUP; in most course listings, the numbers indicate the Examination Group to which the course belongs. Examination Groups usually correspond to class meeting times and ordinarily change if the meeting time changes (see next page). Tutorials and 300/3000-level courses are not typically assigned to an Examination Group.

**Sample catalog listing:**

**TITLE**

Economics 1687. Advanced Economics of the Environment, Natural Resources, and Climate Change

**CATALOG NUMBER**

Catalog Number 44432

**INSTRUCTOR**

Martin L. Weitzman

**MEETING TIME**

Half course (spring term). M., W., 1–2:30; and a weekly recitation T., 4-5:30.

**DESCRIPTION**

Survey of foundations and applications of the modern theory of environmental and natural-resource economics. What are the basic models and what are they suggesting about policy? Externalities, public goods, common property, strategies for controlling pollution. Dynamics of renewable resources (fisheries, forestry) and dynamics of non-renewable resources (minerals like oil). Discounting, uncertainty, cost-benefit analysis, investment criteria for environmental projects, green accounting, sustainability. Basic economic analysis of climate change as prototype example.

**OTHER INFO**

*Note:* Students from other concentrations are welcome to take this course for credit.

**OTHER INFO**

*Prerequisite:* Economics 1010a.
Examinations

Examination Groups

Fall Final/Midyear and Spring Final examinations are ordinarily held in all FAS courses except for tutorials, research seminars, and other low-enrollment courses. Approval for the substitution of other work in lieu of an examination is granted by the Office of Undergraduate Education (100-level or below) or by the Dean of the Graduate School (200-level and above).

The Faculty of Arts and Sciences has published an eight-day Final Examination Schedule. For purposes of scheduling these final examinations, FAS courses are divided into 18 Exam Groups corresponding to class meeting times.

Courses that meet at four popular meeting times, have their own Exam Groups and days:

Exam Group 3 for courses that meet MWF at 10 am.

Exam Group 4 for courses that meet MWF at 11 am.

Exam Group 5 for courses that meet MWF at 12 noon.

Exam Group 13 for courses that meet TuTh at 11 am.

Courses that meet at all other times are combined in Exam Group Sets; courses within each Exam Group Set have their final examinations scheduled on the same day.

All courses assigned to the following Exam Group Sets are scheduled to have their final examinations on the same day:

Exam Groups: 1, 7, 14

Exam Groups: 2, 15, 16
Exam Groups: 6, 10

Exam Groups: 8, 9, 11, 12, 17, 18

Students may enroll in two (or more) courses within the same Exam Group or Exam Group Set, if the meeting times of the courses never conflict. Students in Harvard College should see *Handbook for Students* for a further discussion of simultaneous enrollment.

Note: Students who wish to avoid having two final examinations on one day should not enroll in two (or more) courses with the same Exam Group or within the same Exam Group Set.

Students are reminded that they should be prepared to be available for examinations through the last day of the examination period. For the fall term, the Final Examination Period is December 13, 2012, through December 21, 2012. For the spring term, the Final Examination Period is May 10, 2013, through May 18, 2013. The official dates and times for examinations are posted to the Registrar’s website, [http://www.registrar.fas.harvard.edu/](http://www.registrar.fas.harvard.edu/), two to three weeks after Study Card Day each term.

Classes that meet in sessions longer than one hour are listed in the catalog with more than one Exam Group. The final examination for such a course will be assigned to one of these groups by the Registrar’s Office and announced on the posted schedule. Meeting times for courses listed in this catalog are subject to change; any change in the day or time of a class meeting time will result in a corresponding change in the Examination Group for the course. For courses designated “Examination date to be announced,” the Registrar’s Office will determine the date of the exam, which may be any day of the eight-day examination period.

For rules governing examinations, undergraduates are advised to consult *Handbook for Students*; graduate and special students, *The Graduate School of Arts and Sciences Handbook*.

**Absence of Student due to Religious Beliefs**

“Any student in an educational or vocational training institution, other than a religious or denominational educational or vocational training institution, who is unable, because of his religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable
burden upon such school. No fees of any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.” (Massachusetts Law 151C, Section 2B)

Examination Groups and Dates

The table below shows the dates of final examinations associated with each of the final Examination Groups. For most courses, an Examination Group is published in *Courses of Instruction* within the course description. Examination Groups correspond to course meeting days and times and ordinarily change if the course meeting days and times change. Occasionally, the Office of the Registrar may need to assign an Exam Group that does not correspond to the meeting days and times of a course. All students are therefore advised that they should not make any travel plans until the official Final Examination Schedule is published. Students are expected to be in residence for the duration of the Final Examination Period. For the fall term, the Final Examination Period is December 13, Thursday, through December 21, Friday. For the spring term, the Final Examination Period is May 10, Friday, through May 18, Saturday.

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<th>Examination Group</th>
<th>Fall Final/ Midyear Examination</th>
<th>Spring Final Examination</th>
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<td>1</td>
<td>Dec 20 (Th)</td>
<td>May 11 (Sa)</td>
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<tr>
<td>2</td>
<td>Dec 21 (F)</td>
<td>May 10 (F)</td>
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<td>3</td>
<td>Dec 18 (Tu)</td>
<td>May 18 (Sa)</td>
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<td>4</td>
<td>Dec 19 (W)</td>
<td>May 16 (Th)</td>
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<td>5</td>
<td>Dec 14 (F)</td>
<td>May 15 (W)</td>
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<td>6</td>
<td>Dec 13 (Th)</td>
<td>May 14 (Tu)</td>
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<td>7</td>
<td>Dec 20 (Th)</td>
<td>May 11 (Sa)</td>
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<td>8</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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<td>9</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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<td>10</td>
<td>Dec 13 (Th)</td>
<td>May 14 (Tu)</td>
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<td>11</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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<tr>
<td>12</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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<tr>
<td>13</td>
<td>Dec 17 (M)</td>
<td>May 17 (F)</td>
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<tr>
<td>14</td>
<td>Dec 20 (Th)</td>
<td>May 11 (Sa)</td>
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<tr>
<td>15</td>
<td>Dec 21 (F)</td>
<td>May 10 (F)</td>
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<tr>
<td>16</td>
<td>Dec 21 (F)</td>
<td>May 10 (F)</td>
</tr>
<tr>
<td>17</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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<tr>
<td>18</td>
<td>Dec 15 (Sa)</td>
<td>May 13 (M)</td>
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</table>
Voter Registration

Voter registration forms for the Commonwealth of Massachusetts are available to students during business hours at the Office of the Registrar, 20 Garden Street, Cambridge.

General Education

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on General Education

Edward J. Hall, Professor of Philosophy (Chair)
Emma Dench, Professor of the Classics and of History, Harvard College Professor
Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History (on leave fall term)
Florian Engert, Professor of Molecular and Cellular Biology
Claudine Gay, Professor of Government and of African and African American Studies
Jay M. Harris, Harry Austryn Wolfson Professor of Jewish Studies and Dean of Undergraduate Education (ex officio)
Alison Frank Johnson, Professor of History
Stephanie H. Kenen, Administrative Director of the Program in General Education and Associate Dean of Undergraduate Education (ex officio)
Steven R. Levitsky, Professor of Government
Robert A. Lue, Professor of the Practice of Molecular and Cellular Biology
John G. Morrisett, Allen B. Cutting Professor of Computer Science
James Simpson, Donald P. and Katherine B. Loker Professor of English, Harvard College Professor
Mary M. Steedly, Professor of Anthropology
Christopher Stubbs, Professor of Physics and of Astronomy, Harvard College Professor (spring
As part of the Harvard College Curricular Review, the Faculty of Arts and Sciences voted to replace the existing, thirty-year-old Core Curriculum requirements with a new Program in General Education in order to align these requirements with the educational needs of Harvard College students at the dawn of the twenty-first century. In contrast with the Core Curriculum, which required that students be exposed to a number of different "ways of knowing," the new Program seeks explicitly to "connect a student’s liberal education - that is, an education conducted in a spirit of free inquiry, rewarding in its own right - to life beyond college." In addition, General Education seeks to provide new opportunities for students to learn - and for faculty to teach - in ways that cut across traditional departmental and intra-University lines.

General Education requires that students pass one letter-graded half-course in each of eight categories: Aesthetic and Interpretive Understanding; Culture and Belief; Empirical and Mathematical Reasoning; Ethical Reasoning; Science of Living Systems; Science of the Physical Universe; Societies of the World; United States in the World. One of the eight courses must also engage significantly with the study of the past (these courses are identified in the "Note" field of each catalog entry).

For more information on the Program in General Education, please visit the website www.generaleducation.fas.harvard.edu.

**Aesthetic and Interpretive Understanding**

Courses in the Aesthetic and Interpretive Understanding category focus on the development of aesthetic responsiveness and the ability to interpret forms of cultural expression through the study of literary or religious texts, paintings, sculpture, architecture, music, film, dance, decorative arts, etc. Students learn to engage intelligently and critically with the world of art, literature, and ideas by analyzing works in a theoretical framework.

**Aesthetic and Interpretive Understanding 11. Poetry Without Borders**

Catalog Number: 0416

*Stephanie Sandler (Slavic Languages and Literatures)*

Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13

Studies poetry as a cultural practice that requires and perversely challenges visual, linguistic, geographic, and aesthetic borders. Main topics are translation (poems crossing borders), emigration/exile (poets crossing borders), and poetry and other arts (poems joining with music, film, photography, and philosophy). Poems and prose by Charles Bernstein, Bei Dao, Joseph Brodsky, Paul Celan, Carolyn Forché, Susan Howe, Yang Lian, Stéphane Mallarmé, Haryette Mullen, Vladimir Nabokov, W. G. Sebald, and C. D. Wright, among others; theoretical texts, sound recordings, visual images, films, and poetry performances.

*Note:* Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.
[Aesthetic and Interpretive Understanding 12. Poetry in America]
Catalog Number: 0748
Elisa New (English)
Half course (spring term). M., W., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 6, 7
Surveying 300+ years of poetry in America, from the Puritans to the avant-garde poets of this new century, the course covers individual figures (Poe, Whitman, Dickinson, Frost, Williams, Hughes), major poetic movements (Firesides, Modernist, New York, Confessional, L-A-N-G-U-A-G-E) and probes uses of poetry across changing times. Who, and what, are poems for? For poets? Readers? To give vent to the soul? To paint or sculpt with words? Alter consciousness? Raise cultural tone? Students will read, write about and also recite American poems.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Aesthetic and Interpretive Understanding 13. Cultural Agents
Catalog Number: 0460
Doris Sommer (Romance Languages and Literatures; African and African American Studies) and Francesco Erspamer (Romance Languages and Literatures)
Half course (fall term). M., 3-5, and a weekly section to be arranged. EXAM GROUP: 8, 9
Explore the arts as social and professional resources! Whether you pursue medicine, law, engineering, business, government, etc., the arts will enhance your work and your citizenship. Active citizens construct opportunities for positive social change. A lecture series by a range of professionals demonstrates that change in practically any field depends on art. Theoretical readings (Schiller, Kant, Dewey, Freire, Gramsci, Rancière, Mockus, Boal, Nussbaum, Pasolini, inter alia) are grounded in concrete cases of agency. The final project will be a design for a creative social intervention, including reflections on creating the design.
Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

[Aesthetic and Interpretive Understanding 14 (formerly Literature and Arts C-56). Putting Modernism Together]
Catalog Number: 7613
Daniel Albright (English)
Half course (spring term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
Just as a pine or a willow is known from the shape of its branching, so human culture can be understood as a growth-pattern, a ramifying of artistic, intellectual, and political action. This course tries to find the center of the Modernist movement (1872-1927) by studying the literature, music, and painting of the period, to see whether some congruence of effort in all these media can be found. By looking at the range of artistic production in a few key years, we come to know this age of aesthetic extremism, perhaps unparalleled in Western history.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.
[Aesthetic and Interpretive Understanding 15 (formerly English 34). Elements of Rhetoric]
Catalog Number: 3820 Enrollment: Limited to 100.
James Engell (English)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
Rhetorical theory, originating with Aristotle, in contemporary applications. The nature of rhetoric in modern culture; practical examples drawn from American history and literature 1765 to the present; written exercises and attention to public speaking; the history and educational importance of rhetoric in the West; stresses theory and practice as inseparable.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Aesthetic and Interpretive Understanding 16. Openings: The Illuminated Manuscript
Catalog Number: 30214
Jeffrey F. Hamburger (History of Art and Architecture)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
In an age of mechanical – and now virtual – reproduction, we have lost sight of the basic visual unit that structures our experience of the book: the opening. Employing old and new technologies, this course focuses on medieval books, their decoration and their readers in the Middle Ages (ca. 300–1500), when the book as we have known it, along with allied institutions, such as the university itself, first came into being.
Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

Aesthetic and Interpretive Understanding 20 (formerly Literature and Arts A-22). Poems, Poets, Poetry
Catalog Number: 5808
Helen Vendler (University Professor; English)
Half course (spring term). M., W., (F.), at 1, and a weekly section to be arranged. EXAM GROUP: 6
A study of poetry as the history and science of feeling: readings in major lyric poems of England and America. Emphasis on problems of invention and execution, and on the poet’s choice of genre, stance, context, and structure. Other topics to be raised include the process of composition, the situating of a poem in its historical and poetic contexts, the notion of a poet’s development, the lyric as dramatic speech, and the experimental lyric of the 20th century.
Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Aesthetic and Interpretive Understanding 21 (formerly Literature and Arts A-51). Virgil: Poetry and Reception
Catalog Number: 1565
Richard F. Thomas (The Classics)
Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
Begins with the Aeneid, paradigmatic epic of the West, from various perspectives, involving literary aesthetics and translation theory, Homeric and other intertextuality, concepts of heroism
and anti-heroism, individual choice vs. public responsibility, critique of empire then, now, and in between. Concurrent attention to Virgil tradition in early Christianity, Dante, Milton, Dryden, the Romantics, post-WWI Modernists; influence on music, art, and iconography. Subsequent focus on the Eclogues and Georgics, their place in the traditions of European pastoral and didactic, status as works of early Augustan poetry, and reception from Petrarch to Heaney. 

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Aesthetic and Interpretive Understanding 24 (formerly Literature and Arts B-51). First Nights: Five Performance Premieres**
Catalog Number: 0144
*Thomas F. Kelly (Music)*

*Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

A study of five famous pieces of music, both as timeless works of art and as moments of cultural history. Close attention is given to techniques of musical listening, and to the details of the first performance of each work, with a consideration of the problems involved in assembling such a picture. Works studied are Beethoven, Symphony no. 9; Berlioz, Symphonie fantastique; Stravinsky, Le sacre du printemps; Handel, Messiah; Monteverdi, Orfeo. The course concludes with the first performance of a new work especially commissioned for this course. 

Note: This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**Aesthetic and Interpretive Understanding 25 (formerly Literature and Arts C-55). Surrealism: Avant-Garde Art and Politics between the Wars**
Catalog Number: 7818
*Susan R. Suleiman (Romance Languages and Literatures; Comparative Literature)*

*Half course (spring term). T., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15*

An overview of Surrealism in the context of European culture and politics of the 20th century. Focus on major works of writers, artists, and filmmakers associated with the Surrealist movement, chiefly in the period between the two world wars; some attention also paid to earlier works and movements, and to the influence of and reactions to Surrealism after 1945. Discussion of works by Breton, Aragon, Tzara, Lautrémont, Artaud, Eluard, Carrington, Bunuel and Dali, Dulac, Magritte, Tanning, Ernst, Man Ray, Bellmer, and others. Includes examination of rare books in Houghton Library and/or original art works at local museums. 

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]**
Catalog Number: 8829
*Robin M. Bernstein (Studies of Women, Gender, and Sexuality; African and African American*
2012-2013 Previous Courses of Instruction

Studies
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
Introduction to performance studies as it intersects with studies of gender, sexuality, and race. What does it mean to say gender is “performed”? How does performance—both on- and offstage—construct and deconstruct power? Topics include transgressive and normative gender, feminist and queer theatre, athletics, gender in everyday life, drag, AIDS, and weddings. Texts include Eve Ensler, Ntozake Shange, Judith Butler, Anna Deavere Smith, Cherríe Moraga, David Henry Hwang, Bertolt Brecht, Guillermo Gómez-Peña.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Aesthetic and Interpretive Understanding 29 (formerly Literature and Arts A-48). Modern Jewish Literature]
Catalog Number: 1250
Ruth R. Wisse (Near Eastern Languages and Civilizations; Comparative Literature)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
Great works of fiction become universal and remain able to surprise, delight, inform, or otherwise overwhelm current readers. What gives them this power? How do writers become adjectives like Babelian, Bellovian, or Kafkaesque? This course moves through the twentieth century through the literature of a multilingual people, with works in Hebrew, Yiddish, German, Russian, Italian, and English. We see how variously Jewish writers interpret modern history and their own situation within it.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 30 (formerly Literature and Arts A-92). Love In A Dead Language: Classical Indian Literature and Its Theorists]
Catalog Number: 6240
Parimal G. Patil (Study of Religion; South Asian Studies)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
An exploration of love in five genres of classical South Asian literature—epic history, story literature, plays, poetic miniatures, and court poetry. We will pay particular attention to the nature of literary genres and practices and how they were theorized by South Asian intellectuals. Especially relevant are theories of poetic language, aestheticized emotion (especially love), and literary ornamentation.
Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 31 (formerly Literature and Arts B-85). American Musicals and American Culture]
Catalog Number: 2449 Enrollment: Limited to 150.
Carol J. Oja (Music)
Half course (spring term). Tu., Th., at 12, and a weekly section to be arranged. EXAM GROUP: 14
During much of the 20th century, the Broadway musical stood at the center of American culture, producing tunes and tales that became the hits of their day. It commented—wittily, satirically, relentlessly—on the ever-shifting social and political landscape, with subjects ranging from new immigrants to poverty, power, westward expansion, and issues of race. This course explores the musical artistry and cultural resonances of a cluster of iconic Broadway musicals on stage and screen, including *Shuffle Along, Show Boat, Stormy Weather, The Cradle Will Rock, Oklahoma!,* and *Pacific Overtures.* Readings focus on primary sources drawn from Harvard’s illustrious Theatre Collection.

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.


Catalog Number: 7862

*David F. Elmer (The Classics)*

*Half course (fall term). M., W., at 1, and a weekly section to be arranged. EXAM GROUP: 6*

Did the Greeks and Romans read novels? Fictional prose narratives about adventure and romance in exotic lands were immensely popular in antiquity. We will explore this tradition by reading the five surviving Greek novels, the *Golden Ass* of the Roman Apuleius, and selected other texts, along with works by contemporary theorists and critics. Topics include: definitions of the "novel;" ancient representations of desire; gender and class politics; relationships between secular and religious narratives.

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 34. Interpretation: Artful Reading of Page, Stage, and Screen]

Catalog Number: 75613

*Julie A. Buckler (Slavic Languages and Literatures)*

*Half course (fall term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4*

Explores the practice of interpretation for the humanities. How can we determine whether a given interpretation is valid? Is humanistic interpretation a set of procedures to be learned or an art in itself? What are its aims? We’ll test theories and methods of interpretation on a diverse array of works (text, image, film, performance).

*Note:* Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 35. Forms in Korean Cultural History]

Catalog Number: 8798

*David McCann (East Asian Languages and Civilizations)*

*Half course (fall term). M., W., at 1:30, and a weekly section to be arranged. EXAM GROUP: 6, 7*

This course starts with Korea’s self-presentation through the Korea Wave, then turns to the
features of twentieth century *modernity*. The third part examines historical case studies in cultural survival. *Korea Indigenous* pursues two modes of study, academic and aesthetic: the study of texts, pictures and other formulations of Korean identities, through discussions and writing; and the creation of the aesthetic, for example through writing poems in the Korean *sijo* form.

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture**

Catalog Number: 3203 Enrollment: Limited to 108.  
*Ryuichi Abe (East Asian Languages and Civilizations)*  
*Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*

This course is designed to enable students to analyze a wide range of Japanese cultural creations—including the traditional Noh theater, modern Japanese paintings, and contemporary anime—by illustrating the influence of Buddhism both on their forms and at their depths. The first part of the course is a study of major Buddhist philosophy and its impact on Japanese literature. The second part observes Buddhist ritual practices and their significance for Japanese performing arts. The last part traces the development of Japanese Buddhist art, and considers the influence of Buddhism on diverse contemporary popular Japanese art media.

*Note:* This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**[Aesthetic and Interpretive Understanding 37. Introduction to the Bible in the Humanities and the Arts]**

Catalog Number: 92966  
*Gordon Teskey (English)*  
*Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4*

A course on the structure of the Bible, which William Blake called “the great code of art.” Major themes include the invention of God, the invention history, and the invention of the city (or rather, of two cities, that of the devil and that of God). About two-thirds of the Authorized Version (King James) of 1611 will be read.

*Note:* The course does not count for the English concentration "Arrivals" requirement. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**[Aesthetic and Interpretive Understanding 38. The English Language as Literature]**

Catalog Number: 47723  
*Daniel Albright (English)*  
*Half course (fall term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5*

This course will recount the development of English literature, from Caedmon’s hymn to *Ulysses*, as a story about the development of the English language, its new musculatures: how
the steady accretion of linguistic and word-musical possibilities (French and Latin vocabulary, Italian stanza forms, Germanic and Celtic archaisms, finally a sort of pan-European synthesis) shaped the works of Chaucer, Spenser, Milton, Swift, MacPherson, Wordsworth, Tennyson, Hopkins, Yeats, Joyce, and Beckett.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 39 (formerly Chinese Literature 150). Old Tales for New Times: The Appropriation of Folklore in Modern and Contemporary China]
Catalog Number: 7777
Wilt L. Idema (East Asian Languages and Civilizations) and David Der-Wei Wang (East Asian Languages and Civilizations)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
This class will look at China’s most famous traditional tales, such as Mulan, The White Snake, Meng Jiangnü and Liang Shanbo and Zhu Yingtai (the Butterfly Lovers?). We will study both the richness and variety of these tales in premodern times, and look into their modern and contemporary manifestations in fiction, stage, cinema and other popular media. Special emphasis is put on tradition and modernity, gender and moral dynamics, regionalism and nationalism.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

[Aesthetic and Interpretive Understanding 40. Monuments of Islamic Architecture]
Catalog Number: 94499
Gülru Necipoglu-Kafadar (History of Art and Architecture) and David J. Roxburgh (History of Art and Architecture)
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
An introduction to ten iconic monuments of the Islamic world from the beginning of Islam to the early modern period. The course introduces various types of building-mosques, palaces, multifunctional complexes-and city types and the factors that shaped them, artistic, patronal, socio-political, religio-cultural, and economic. Each case study is divided into two lectures. The first presents the monument or city by "walking" through it. The second is devoted to themes elicited from the example, developed in light of comparative monuments, sites, and/or written sources, and to problems of patronage, production, audience and meaning as they pertain to architectural history.

Note: Expected to be given in 2014–15. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Aesthetic and Interpretive Understanding 41 (formerly Literature and Arts C-30). How and What Russia Learned to Read: The Rise of Russian Literary Culture]
Catalog Number: 7952
William Mills Todd III (Slavic Languages and Literatures; Comparative Literature)
Half course (spring term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3
A study of the emergence of a secular literary tradition in the Russian imperial period. Focus on cultural institutions (religion, art, literature), issues of the aesthetic and social critique, and problems of interpretation for contemporary and modern readers. Analysis of novels by Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, and Tolstoy.

Note: No knowledge of Russian required. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or Culture and Belief, but not both. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

[Aesthetic and Interpretive Understanding 42. Literature and Revolution: Great Books in Moments of Cultural Transformation]

Catalog Number: 88601
James Simpson (English)
Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12

What is the function of literary texts in moments, from Plato to the Russian Revolution, that promise total, enlightened societal transformation? Each week, this course will focus on two texts related to selected “revolutionary” moments, one philosophical and one literary. Literary texts do not participate easily in the revolutionary order. They resist the textual simplicities of philosophy. Which do we trust: philosophy or literature? Texts include many found in traditional “Great Books” courses: Plato, Virgil, Augustine, Dante, Luther, Milton, Swift, Rousseau, Twain, Kant, Marx, and Chekov, among others.

Note: Expected to be given in 2013–14. Students who have taken Culture and Belief 18 may not take this course for credit. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

[Aesthetic and Interpretive Understanding 44. Arts of Asia]

Catalog Number: 79929
Melissa M. McCormick (East Asian Languages and Civilizations), Yukio Lippit (History of Art and Architecture), and Eugene Wang (History of Art and Architecture)
Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4

Examines the materials and artistic processes of artifacts from China, Korea, and Japan, as well as the historical, social, religious, and philosophical contexts in which they were produced. Each week focuses on a different type of object (ceramics, prints, painting, calligraphy, sculpture, architecture, and performance art) linked to different types of spaces (the tomb, household, palace, temple, shrine, and the city). Emphasizes up-close analysis of objects selected from the Harvard Art Museum’s collections. Students will work from the beginning of the semester toward a final project consisting of mounting their own (virtual) exhibition of East Asian art.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Aesthetic and Interpretive Understanding 45 (formerly Foreign Cultures 72). Art and Politics in Russia and Eastern Europe]
Catalog Number: 5581  
**Svetlana Boym (Slavic Languages and Literatures; Comparative Literature)**  
**Half course (fall term). Tu., 2-4, and a weekly section to be arranged. EXAM GROUP: 16, 17**  
The course examines the relationship between art and politics in twentieth century Russia and Eastern Europe through visual culture, literature, and film. We move chronologically from the Russian revolution and the period of artistic experimentation to the art of Stalin’s era, Gulag and the Cold War, examining writer’s trials and dissent in Russia and Eastern Europe as well as the non-conformist art of the late twentieth century. Emphasis is placed on close analysis and aesthetic interpretation in a broader political and historical context. We read works by Malevich, Chagall, Eisenstein, Babel, Brodsky, Mandelstam, Mayakovsky, Havel, Kundera, Arendt, Vajda and Nabokov.  
**Note:** Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or Literature and Arts C, but not both.

[Aesthetic and Interpretive Understanding 46 (formerly Literature and Arts B-49). Modernisms 1865–1968]  
Catalog Number: 7619  
**Benjamin Buchloh (History of Art and Architecture)**  
**Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15**  
This course introduces the complex and contradictory history of modernism in the visual arts of Europe and the US, focusing on central figures (e.g. Manet, Picasso, Duchamp, Warhol) and movements (e.g. Cubism, Dada, Soviet Avant-garde), as much as on the key concepts of that history. Lectures will emphasize the methodological diversity developed within recent art history to theorize and historicize Modernism. Readings will comprise key texts by artists, historians, and critics.  
**Note:** This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Aesthetic and Interpretive Understanding 47 (formerly Literature and Arts A-90). Forbidden Romance in Modern China]  
Catalog Number: 7766  
**David Der-wei Wang (East Asian Languages and Civilizations)**  
**Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4**  
This course introduces a unique dimension of Chinese modernity: amorous engagement in fiction and lived experience, its discursive and visual representations, and its institutional implementation (gender, marriage, family, law, nation/state, etc.), censorship, and transgression. It examines how the modern lure of free will and emancipated subjectivity drove Chinese to redefine terms of affect, such as love, feeling, desire, passion, sexuality, loyalty, dedication, revolution and sacrifice. It also looks into how the moral, legal and political consequences of affect were evoked in such a way as to traverse or fortify consensual boundaries and their manifestations.
Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 49 (formerly Medieval Studies 114). The Medieval Imagination: Visions, Dreams, and Prophecies]
Catalog Number: 3080
Nicholas Watson (English)
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
The medieval imagination was the ambigious mediator between the world and the mind: a mental space in which either prophetic truths or dreams and diabolic deceptions might be experienced, in which material and spiritual realities were reflected as in a mirror, and in which those complex constructs we call "fictions" found their source. This course investigates dream poetry and visionary writing in the context of medieval psychological theory. Texts to be read include Boethius’s *Consolation of Philosophy*, The Romance of the Rose, Dante’s *Divine Comedy*, John of Morigny’s *Book of Flowers*, and works by Augustine, Julian of Norwich, and others.
Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 50 (formerly Literature 128). Literature and Medicine]
Catalog Number: 25702
Karen Thornber (Comparative Literature)
Half course (fall term). Tu., 1-3, and a weekly section to be arranged. EXAM GROUP: 15, 16
Examines the relationship between literature and medicine through creative texts that question understandings, shatter binaries, and reconceptualize notions of normality/disability, health/disease, and life/death. Pays particular attention to the work of physician-writers and narratives by patients.
Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Aesthetic and Interpretive Understanding 51 (formerly Italian 131). The Cosmos of the Comedy]
Catalog Number: 49715
Jeffrey Schnapp (Romance Languages and Literatures)
Half course (fall term). M., 1-3, and a weekly section to be arranged. EXAM GROUP: 6, 7
This lecture course provides an in-depth introduction to Dante Alighieri’s 14th-century masterpiece, the *Divine Comedy*, from the standpoint of its sustained dialogue with some of the most influential epic poems from Roman antiquity: Virgil’s *Aeneid*, Ovid’s *Metamorphoses*, Statius’s *Thebaid*, and Lucan’s *Pharsalia*. One of the course’s highlights is a multimedia web-based competition in which all enrolled students compete for the annual Bedeviled Harvard prize.
Note: Expected to be given in 2013–14. Conducted in English. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study
of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Aesthetic and Interpretive Understanding 53 (formerly Japanese Literature 161). Anime as Global Popular Culture
Catalog Number: 49149
Tomiko Yoda (East Asian Languages and Civilizations) and Alexander Nikolas Zahlten (East Asian Languages and Civilizations)
Half course (spring term). Tu., Th., at 2, weekly film screenings on Mondays 7-9 pm, and a weekly section to be arranged. EXAM GROUP: 16
This course examines a wide range of contemporary animated films and TV series made in Japan through their generic conventions, formal aesthetics, and narrative themes. Special attention will be paid to the relations between anime and various other commercial as well as non-commercial mediums such as manga, live-action films, video games, pop music, character merchandises, and fanzines.
Note: Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
Catalog Number: 7027
Ali S. Asani (Study of Religion; Near Eastern Languages and Civilizations)
Half course (spring term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14
The course surveys the literary and artistic dimensions of the devotional life of the world’s Muslim communities, focusing on the role of literature and the arts (poetry, music, architecture, calligraphy, etc.) as expressions of piety and socio-political critique. An important aim of the course is to explore the relationships between religion, literature, and the arts in a variety of historical and cultural contexts in the Middle East, sub-Saharan Africa, South Asia, Europe, and America.
Note: Expected to be given in 2013–14. No prior knowledge of Islam required. Offered jointly with the Divinity School as 3627. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade meets the Core area requirement for Foreign Cultures or Literature and Arts C, but not both.

Aesthetic and Interpretive Understanding 55 (formerly Literature and Arts A–40). Shakespeare, The Early Plays – (New Course)
Catalog Number: 45945
Marjorie Garber (English; Visual and Environmental Studies)
Half course (fall term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3
The early comedies, tragedies, and histories, considered in the context of the origins of the English stage and the conventions of Elizabethan drama. Particular attention paid to Shakespeare’s development as a dramatist, and to poetic expression, thematic design, stagecraft,
and character portrayal in plays.

Note: This course, when taken for letter grade, meets the Department of English Shakespeare requirement. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Aesthetic and Interpretive Understanding 58. Modern Art and Modernity - (New Course)**
Catalog Number: 99586
Ewa Lajer-Burcharth (History of Art and Architecture), Maria Elizabeth Gough (History of Art and Architecture), and Benjamin Buchloh (History of Art and Architecture)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13

The course examines the defining moments in the development of modern European and American art from the eighteenth- through to the twentieth-century. Anchored by a significant date, each lecture focuses on the relationship between a major artistic event and the social, political, cultural, and technological conditions of its emergence. A wide range of media, from painting, sculpture, and print-making to photography, photomontage, video, installation, and performance art, will be considered. Situating the key aesthetic transformations that defined art’s modernity in a broader historical context, the course explores the fundamental role of advanced forms of artistic practice in the formation of modern culture and society.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**Cross-listed courses that satisfy the Aesthetic and Interpretive Understanding requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.**

[African and African American Studies 179 (formerly Literature and Arts B-82). Jazz, Freedom, and Culture]
[Culture and Belief 28. Hindu Worlds of Art and Culture]
Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China
Culture and Belief 45 (formerly English 101). The History of the English Language
Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion
English 157. The Classic Phase of the Novel
English 182. Science Fiction
English 192. Political Theatre and the Structure of Drama
*Folklore and Mythology 90i (formerly Aesthetic and Interpretive Understanding 27). Fairy Tales and Fantasy Literature*
History of Art and Architecture 1. Landmarks of World Art & Architecture
[History of Art and Architecture 10. The Western Tradition: Art Since the Renaissance]
History of Art and Architecture 11. Landmarks of World Architecture
History of Art and Architecture 172w. American Art and Modernity, 1865–1965
Literature 101 (formerly Literature 11). Writing Across Cultures: Literatures of the World (from 1750 to the present)
[Literature 103 (formerly Literature 10). Writing Across Cultures: Literatures of the World (to 1750)]

Medieval Studies 107. Authority and Invention: Medieval Art and Architecture

Music 1a. Introduction to Western Music from the Middle Ages to Mozart

Music 1b. Introduction to Western Music from Beethoven to the Present

Music 2. Foundations of Tonal Music I

*Music 51a. Theory I

*Music 51b. Theory 1

[Music 190gw (formerly Music 190rs). South Indian Music]

[Music 194gs. Special Topics: Proseminar]

[Scandinavian 150. The Vikings and the Nordic Heroic Tradition]

[Slavic 148. Strange Russian Writers]

Culture and Belief

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The aim of courses in the Culture and Belief category is to develop an understanding of and appreciation for the ways that social, political, religious, economic, and historical conditions shape the production and reception of ideas and works of art, either within or across cultural boundaries. Students in these courses examine how cultures and beliefs affect the identities of individuals and communities. Courses in this category draw connections between the material covered in the course and cultural issues of current concern or interest.

Culture and Belief

[Culture and Belief 11. Medicine and the Body in East Asia and in Europe]
Catalog Number: 8736

Shigehisa Kuriyama (East Asian Languages and Civilizations)

Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4

Comparative historical exploration of the striking differences and unexpected similarities between traditional conceptions of the body in East Asian and European medicine; the evolution of beliefs within medical traditions; the relationship between traditional medicine and contemporary experience.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[Culture and Belief 13. The Contested Bible: The Sacred-Secular Dance]
Catalog Number: 9458

Jay M. Harris (Near Eastern Languages and Civilizations)

Half course (spring term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3

A short history of the Bible. Questions addressed include how the Bible became a book, and how that book became sacred; the advantages and burdens of a sacred text; Jewish-Christian disputations; how interpretive efforts helped create and reinforce powerful elites; how that text became the object of criticism; and how the Bible fared after the rise of criticism.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Culture and Belief 14. Human Being and the Sacred in the History of the West]**
Catalog Number: 4605
Sean D. Kelly (Philosophy)
Half course (fall term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
A culture’s understanding of what it is to be human interacts with its understanding of what is sacred. Great works of art in the culture typically reflect or articulate these notions. This course will explore the themes of human being and the sacred as they are manifested in some of the greatest works in the history of the West. Readings chosen from among Homer, Aeschylus, Virgil, the New Testament, Augustine, Dante, Luther, Pascal, Kant, Melville, and others.

**[Culture and Belief 16 (formerly Folklore and Mythology 100). Performance, Tradition and Cultural Studies: An Introduction to Folklore and Mythology]**
Catalog Number: 6753
Stephen A. Mitchell (Germanic Languages and Literatures; Folklore and Mythology)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
Examines major forms of folklore (e.g., myths, legends, epics, beliefs, rituals, festivals) and the theoretical approaches used in their study. Analyzes how folklore shapes national, regional, and ethnic identities, as well as daily life; considers the function of folklore within the groups that perform and use it, employing materials drawn from a wide range of areas (e.g., South Slavic oral epics, American occupational lore, Northern European ballads, witchcraft in Africa and America, Cajun Mardi Gras).

**[Culture and Belief 17 (formerly Historical Studies B-06). Institutional Violence and Public Spectacle: The Case of the Roman Games]**
Catalog Number: 2603
Kathleen M. Coleman (The Classics)
Half course (spring term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3
Gladiatorial combat, beast fights, staged hunts, mock naval battles, and exposure of criminals to wild animals were defining features of the culture of ancient Rome. Examining texts and images from across the Roman world, this course seeks to identify and probe the values, attitudes, and social, political, and economic factors that contributed to the popularity of institutionalized violence as public entertainment for six hundred years from the Punic Wars until the Christianization of the Empire.
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Catalog Number: 1065
Ali Asani (Study of Religion; Near Eastern Languages and Civilizations)

Half course (fall term). Tu., 7:40-9:40 p.m., and a weekly section to be arranged. EXAM GROUP: 18

The course is an introduction to the fundamental concepts of Islam and the role that religious ideas and institutions play in Muslim communities around the world. Its main concern is to develop an understanding of the manner in which diverse notions of religious and political authority have influenced Muslim societies politically, socially and culturally. Through specific case studies of countries such as Saudi Arabia, Iran, Turkey, Egypt, Pakistan, and Afghanistan, the course considers the role played by ideologies such as jihad, colonialism, nationalism, secularism, and globalization in shaping the ways in which Muslims interpret and practice their faith today. The course briefly considers the contemporary situation of Muslim minorities in Europe and the United States. The course, through on-campus and on-line options, allows those enrolled to engage with students from all over the world.

Note: Offered jointly with the Divinity School as 3628. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or Historical Study A, but not both.

Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
Catalog Number: 8149
Ann M. Blair (History)

Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4

Examines from an historical perspective one of the central themes in the Western intellectual tradition: the desire to reconcile rational philosophy with religious and biblical authority. Discusses the transformations in conceptions of reason, science, biblical interpretation, and divine intervention (among other themes) in the context of the long period of change from medieval to modern. Readings emphasize primary sources—including, for example, Augustine, Aquinas, Galileo, Descartes, Newton, and Darwin.

Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes—Culture, History, and Beliefs in Andean South America
Catalog Number: 2073
Gary Urton (Anthropology)

Half course (spring term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16
This course explores the arts and cultures of Andean South America from the Pre-Columbian through Colonial periods. Emphasis is on the place of objects—textiles, ceramics, sculptures, and books—in the construction of meanings, identities and values as these changed over time. Readings are drawn from archaeology, ethnohistory, ethnology, art history and original sources. Students will work with Pre-Columbian and Colonial Andean artifacts in the collections of the Peabody Museum.

Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization
Catalog Number: 3915
Gregory Nagy (The Classics; Comparative Literature)
Half course (fall term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
The readings, all in English translation, are the Homeric Iliad and Odyssey, seven tragedies (Aeschylus’ Oresteia Trilogy, Sophocles’ two Oedipus dramas, and Euripides’ Hippolytus and The Bacchic Women), and two dialogues of Plato (the Apology and the Phaedo, both centering on the last days of Socrates); also, selections from the New Testament, especially from the Gospel according to Mark, and from the dialogue On Heroes by an eminent thinker in the “second sophistic” movement, Philostratus.

Note: Students who have taken Literature and Arts C-14 may not take this course for credit. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

Culture and Belief 23 (formerly Literature and Arts C-70). From the Hebrew Bible to Judaism, From the Old Testament to Christianity
Catalog Number: 5275
Shaye J.D. Cohen (Near Eastern Languages and Civilizations)
Half course (fall term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3
The Hebrew Scriptures, what Christians call the “Old Testament” and Jews call the “Bible,” are the basis of both Judaism and Christianity. In this course we shall survey how this work of literature, through interpretation and re-interpretation, spawned two different cultural systems. Topics to be surveyed include: canon and prophecy; exegesis and Midrash; Shabbat and Sunday; temple, synagogue, church; the Oral Torah and the Logos; sin and righteousness; messiah and redemption.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
Catalog Number: 1316
Janet Gyatso (Harvard Divinity School)
Half course (fall term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP:
A critical introduction to key ideas, values, people and practices in Buddhist traditions. The course offers a chance to explore Buddhism’s distinctive doctrines about human experience, to study the import of its disciplinary and meditative practices, and to appreciate some of its outstanding works of literature. It highlights the way that Buddhism shifted as it spread across Asia and adapted to new cultural contexts, a process that still continues, now across the world. This allows us to study both the historical contributions of Buddhism to the philosophies and self-cultivation traditions of Asia, and the new ways it serves as a global human heritage in the contemporary context.

*Note:* Offered jointly with the Divinity School as 3830. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**[Culture and Belief 26 (formerly Foreign Cultures 81). The Culture of Everyday Life in China]**

*Catalog Number: 8733*

Peter K. Bol (East Asian Languages and Civilizations) and Michael A. Szonyi (East Asian Languages and Civilizations)

*Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*

An inquiry into social and cultural life in China, past and present, through an exploration of the patterns of everyday life over the last thousand years in a single region, now known as Jinhua. We use writings from local women and men in the past, interviews with their descendants today, the ancestral halls and genealogies of multi-generational families, shrines and temples of local gods, and extensive photo documentation as sources for understanding how life was experienced by the inhabitants of a community, farmers and scholars alike, and how that community was related to the larger world.

*Note:* Expected to be given in 2014–15. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**Culture and Belief 27 (formerly Jewish Studies 55). Among the Nations: Jewish History in Pagan, Christian and Muslim Context**

*Catalog Number: 2338*

Rachel L. Greenblatt (Near Eastern Languages and Civilizations)

*Half course (fall term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4*

Can we trace an “authentic” Jewish identity through history, as distinct from many “cultures” of Jews in the multitude of times and places in which they have lived? This course provides an overview of major trends in Jewish civilization from biblical times through the early modern era (to approximately the 17th century), with this and related questions in mind, by engaging in close readings of traditional Jewish sources on the one hand and seeking contextual understandings of Jews and Judaism within various non-Jewish settings on the other.

*Note:* Required of all secondary concentrators in Jewish Studies, unless excused by the DUS.
This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

[Culture and Belief 28. Hindu Worlds of Art and Culture]
Catalog Number: 24091
Diana L. Eck (South Asian Studies; Study of Religion)
Half course (fall term). M., W., F., at 12, and a weekly section to be arranged. EXAM GROUP: 5
An exploration of the narratives and arts of the Hindu tradition, considering the great gods—Vishnu, Krishna, Shiva, and Devi—that give expression to a profound vision of the world, the images through which the gods are envisioned, the temples and pilgrimage places where they are worshipped, and the rituals and festivals that are part of Hindu life. Readings include the Ramayana, the Bhagavad Gita, the Gita Govinda, the Shiva Purana, and the Devi Mahatmya.
Note: Expected to be given in 2013–14. Students who have taken Literature and Arts C-18 may not take this course for credit. Offered jointly with the Divinity School as 3412. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C or Foreign Cultures, but not both.

Culture and Belief 30. Seeing is Believing: A History of Photography
Catalog Number: 5649
Robin E. Kelsey (History of Art and Architecture)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
Modern society is unthinkable without the photograph, and yet we rarely have occasion to ponder what photographs are, what they do, and how they do it. In this course, we will consider photography from its origins to the digital era, paying particular attention to its role as an engine of belief in various cultural domains. Our goal will be to understand more incisively how photographs define and shape relations between their subjects and their viewers.
Note: Expected to be omitted in 2013–14. Students who have taken Literature and Arts B-24 may not take this course for credit. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Culture and Belief 31 (formerly Philosophy 19). Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion]
Catalog Number: 6837
Jeffrey K. McDonough (Philosophy)
Half course (spring term). M., W., (F.), at 1, and a weekly section to be arranged. EXAM GROUP: 6
An introduction to the history of intellectual reflection on religion and belief in the western tradition. We will read roughly a half dozen perennial works drawn from authors ranging from St. Augustine of Hippo to Friedrich Nietzsche. Along the way, we will think, discuss, and write about topics such as the nature of sin, the origin of evil, the attributes of God, the argument from design, and the relationship between religion and morality.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**[Culture and Belief 32. Back Roads to Far Places: Literature of Journey and Quest]**
Catalog Number: 39198  
Stephanie A. Paulsell (Harvard Divinity School) and William A. Graham, Jr. (Harvard Divinity School; Near Eastern Languages and Civilizations)
*Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3*
Explores themes of journey and quest in world literature and the interplay between their literary and religious dimensions. Considers the relationship between physical and interior journeys, home and exile, quest and peregrination. Emphasis will be on careful reading of, and thoughtful essays on, texts such as Gilgamesh, the Bible, Quest of the Holy Grail, Walden, and works by Tolkien, Dante, Teresa of Avila, Ashvaghosha, Hesse, Basho, Shusako Endo, Charles Johnson, Virginia Woolfe, and Cormac McCarthy.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2490. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**[Culture and Belief 33. Introduction to the Study of East Asian Religions]**
Catalog Number: 34911  
James Robson (East Asian Languages and Civilizations)
*Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*
This course provides an introduction to the study of East Asian religions. It covers the development of Buddhism, Daoism, Confucianism and Shinto. It is not a comprehensive survey, but is designed around major conceptual themes, such as ritual, image veneration, mysticism, meditation, death, and category formation in the study of religion. The emphasis throughout the course is on the hermeneutic difficulties attendant upon the study of religion in general, and East Asian religions in particular.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3010. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Culture and Belief 34 (formerly Historical Study A-87). Madness and Medicine: Themes in the History of Psychiatry]**
Catalog Number: 6692  
Anne Harrington (History of Science)
*Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12*
Psychiatry is one of the most intellectually and socially complex and fraught fields of medicine today, and history offers one powerful strategy for better understanding why. Topics covered in this course include the invention of the mental asylum, early efforts to understand mental disorders as disorders of the brain or biochemistry, the rise of psychoanalysis, psychiatry and
war, the rise of psychopharmacology, the making of the DSM, anti-psychiatry, and more.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**Culture and Belief 35. Classical Mythology**
Catalog Number: 69871
Andreas Thomas Zanker (The Classics)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13

The myths of the Greeks and Romans: creation myths, Greek gods, Greek heroes and Roman myths. Their relationship to the mythology of neighboring people (Hittites, Babylonians, Hebrews). Their importance for Greek and Roman societies and cultures. Their reception in literature and art from the ancient world to 21st century, and their importance as a foundation of our own modern culture and society. The course will be focused on the analysis of primary sources (read in translation) and works of art (literature, painting, sculpture, movies); ancient mythology will also be studied under the light of modern theories on mythology.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**Culture and Belief 37 (formerly Studies of Women, Gender, and Sexuality 1122). The Romance: From Jane Austen to Chick Lit**
Catalog Number: 8181
Linda Schlossberg (Studies of Women, Gender, and Sexuality)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4

A critical investigation of the genre’s enduring popularity, beginning with Austen’s satirical *Northanger Abbey* and three novels credited with providing narrative templates for contemporary romances (*Pride and Prejudice, Jane Eyre, Wuthering Heights*). We will then read twentieth-century revisions of these works (*Rebecca, Wide Sargasso Sea, Bridget Jones’s Diary*). Topics: the female writer and reader/consumer of literature; moral warnings against romance, “sensation,” and titillation; the commodification of desire; Harlequins; the relationship between high culture and low.

Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the Culture of Medieval Rus’**
Catalog Number: 2798
Michael S. Flier (Slavic Languages and Literatures)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4

When the natives of Medieval Rus (later Russians, Ukrainians, and Belarusians) accepted Orthodox Christianity in the 10th century, their nature-based paganism gave way to a powerfully sensual belief system that made good use of the visual and the verbal to prepare these newest Christians for the coming Apocalypse and Last Judgment. We investigate this transformation from the conversion of Saint Vladimir and the excesses of Ivan the Terrible through the Time of
Troubles and the modern turn of Peter the Great. The class features close analysis of architecture, icons and frescoes, ritual, folklore, literature, and history to understand this shift in worldview, including the role of women. Special attention is devoted to the ways in which Medieval Rus is portrayed in film, opera, and ballet. 

*Note:* All readings in English. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Culture and Belief 39 (formerly Literature and Arts A-93). The Hebrew Bible]**

Catalog Number: 9783  
Shaye J.D. Cohen (Near Eastern Languages and Civilizations)  
Half course (fall term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3  
This course is a survey of the major books and ideas of the Hebrew Bible (commonly called the Old Testament). The course will also treat the historical contexts in which the Bible emerged, and the Bible’s role as canonical scripture in Judaism and Christianity.  
*Note:* All readings in translation. No prior knowledge of the subject is assumed. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China]**

Catalog Number: 8730  
David Der-wei Wang (East Asian Languages and Civilizations)  
Half course (fall term). M., W., at 11, and a weekly section to be arranged. Four additional sessions to be arranged for screening of films. EXAM GROUP: 4  
This course examines “popular culture” as a modern, transnational phenomenon and explores its manifestation in Chinese communities (in People’s Republic of China, Taiwan, Hong Kong, Southeast Asia and North America) and beyond. From pulp fiction to film, from “Yellow Music” to “Model Theater”, from animations to internet games, the course looks into how China became modern by participating in the global circulation of media forms, and how China helps in her own way enrich the theory and practice of “popular culture”.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts C, but not both.

**[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]**

Catalog Number: 0352  
Afsaneh Najmabadi (History; Studies of Women, Gender, and Sexuality)  
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5  
This course will focus on how concepts of woman and gender have defined meanings of religious and national communities in the Islamic Middle East and North Africa. It will survey changes in these concepts historically through reading a variety of sources—religious texts and commentaries, literary and political writings, books of advice, women’s writings, and films—and
will look at how contemporary thinkers and activists ground themselves differently in this historical heritage to constitute contesting positions regarding gender and national politics today. 

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or Historical Study A, but not both.

**Culture and Belief 42 (formerly Foreign Cultures 92). Communism and the Politics of Culture: Czechoslovakia from the Prague Spring to the Velvet Revolution**  
Catalog Number: 5237  
*Jonathan H. Bolton (Slavic Languages and Literatures)*  
*Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4*  
Examines how the intense political pressures of invasion, occupation, and revolution shape a country’s intellectual life and are shaped by it in turn, looking at Czechoslovakia’s literature, drama, film, and music from the 1948 Communist takeover, through the Prague Spring and Soviet invasion of 1968, to the 1989 Velvet Revolution, a hallmark of the peaceful overthrow of Communism in Central Europe. We consider works by Milan Kundera, Bohumil Hrabal, Vaclav Havel; films by Milos Forman, Vera Chytilova, Jiri Menzel; theories of political dissent and the “anti-politics” of Charter 77; and questions of historical memory in contemporary Prague. 

*Note:* Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**Culture and Belief 43. The World of Yiddish**  
Catalog Number: 94372  
*Ruth R. Wisse (Near Eastern Languages and Civilizations; Comparative Literature)*  
*Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*  
Explores the culture and way of life of what was, before World War II, the largest Jewish community in the world, whose descendants still constitute the majority of American Jews. Its common language, Yiddish, spread with its speakers from Western to Eastern Europe from the 14th century onward. Through interdisciplinary approach, including history, literature, music, popular culture, course examines Yiddish as vehicle of Jewish tradition and modernization. Often associated with humor, its speakers were main victims of Hitler’s Final Solution. We will try to identify paradoxical features of Yiddish culture that may account for its exceptional fate. 

*Note:* This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or Literature and Arts C, but not both.

**Culture and Belief 45 (formerly English 101). The History of the English Language**  
Catalog Number: 1987  
*Daniel G. Donoghue (English)*  
*Half course (spring term). Tu., Th., at 11, and weekly section to be arranged. EXAM GROUP: 13*  
Everyone who uses English has experienced its idiosyncrasies. Why is pronunciation at odds with spelling? Why so many irregular verbs? What happened to "thou"? What did Shakespeare
sound like? How do we know? What about the current stature of English as a world language? This course addresses such questions as it surveys the long history of the language. While the topic is fascinating on its own, a historical knowledge of English gives critical and creative writers more command over the medium of their craft; it also sharpens reading skills. Lectures will be supplemented by exercises from the course website.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**[Culture and Belief 46. Music, Debate, and Islam]**
Catalog Number: 87585
Richard K. Wolf (Music)

*Half course (spring term). Tu., 1-3, and weekly section to be arranged. EXAM GROUP: 15, 16*

This course focuses on the arts of sound practiced by Muslims and on debates associated with “music” in a range of Islamic contexts. The purposes are to understand from a musically informed perspective a set of interrelated musical practices that cut across regions (especially South and West Asia); and how different ideologies, philosophies, and texts—associated with Islam locally, nationally, and internationally—shape local understandings and constructions of sound. The content of classes will include lectures, discussions, live musical demonstrations and careful review of audio-visual materials. Students will also have the opportunity to learn to play or sing Persian music.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**[Culture and Belief 47 (formerly Historical Study B-45). The Darwinian Revolution]**
Catalog Number: 8691
Janet Browne (History of Science)

*Half course (fall term). M., W., (F.) at 10, and a weekly section to arranged. EXAM GROUP: 3*

Why is evolutionary theory so controversial in the public sphere? This course looks to the history of cultural changes in the West for answers. We cover the intellectual structure and social context of evolutionary ideas as they emerged in the 19th and 20th centuries, with particular emphasis on Darwinism as a major transformation in Western thought. Topics include an introduction to origin stories in different cultures; the natural history tradition in the West; evolutionary thought before Darwin; key aspects of Darwin’s ideas; the comparative reception of Darwinism in Britain, US, Germany, Russia and France; social Darwinism, eugenics and racial theories; early genetics and the search for the gene; religious controversy then and now. The course alternates every year with Culture and Belief 20.

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.
[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]
Catalog Number: 7991
Peter Machinist (Near Eastern Languages and Civilizations)
Half course (spring term). M., W., (F.), at 12, and a weekly section to be arranged. EXAM GROUP: 5
An examination of the biblical book of Job along with related texts, ancient, medieval, and modern, that allow us to establish the literary and philosophical traditions in which Job was composed and the literary and philosophical legacy it has left. Particular focus on the ways the texts play off one another in literary form and expression and in their treatment of such themes as divine justice, human piety, and the nature of the divine-human encounter.
Note: Expected to be omitted in 2013–14. Expected to be given in 2014–15. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Culture and Belief 49 (formerly Literature and Arts A-86). American Protest Literature from Tom Paine to Tupac]
Catalog Number: 7442
John Stauffer (English; African and African American Studies) and Timothy P. McCarthy (History and Literature; Harvard Kennedy School)
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
This interdisciplinary course examines the rich tradition of progressive protest literature in the US from the American Revolution to the rise of Hip Hop, globalization, and modern-day slavery. Using a broad definition of "protest literature," it focuses on the production and consumption of dissent as a site of progressive social critique, using a wide variety of print, visual, and oral forms. We examine the historical links between modes of protest and meanings of literature, and explore how various expressions of dissent function as aesthetic, performative, rhetorical, and ideological texts within specific cultural contexts. "Readings" range from novels to photographs and music.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[Culture and Belief 50. The European Postwar: Literature, Film, Politics]
Catalog Number: 88659
Peter E. Gordon (History)
Half course (fall term). M., W., at 1, screening of seven films (approximately every other M., 7-9 p.m.), and a weekly section to be arranged. EXAM GROUP: 6
What happened in the last half century in European culture and politics? How can we read history through culture, and culture through history? This undergraduate lecture survey explores the cultural and intellectual history of post-war Europe, with an emphasis on literature, film, and the role of intellectuals and artists in public and political debate. In this course we will explore some of the greatest works of postwar film and literature, tracing out the transformation of European modernism and the rise of post-modernism, in conjunction with the rise of new modalities of political discourses concerning communism, democracy, colonialism, and
sexuality.

Note: Expected to be given in 2013–14. The course includes seven classic novels by postwar European author, and seven of the greatest postwar films by noteworthy European directors. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**Culture and Belief 51. Making the Middle Ages - (New Course)**
Catalog Number: 79782 Enrollment: Limited to 42.
_Daniel L. Smail (History; Medieval Studies)_
_Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13_

This course offers a general introduction to the cultures and beliefs of medieval Europe through an object-centered study of medieval artifacts and cultural productions. It seeks to kindle the curiosity and spirit of inquiry of students by emphasizing active engagement with problems of interpretation and understanding. The course will serve a dual purpose, both as an invitation to explore the interdisciplinary field of medieval studies and as an introduction to some of the many ways in which we can tease ideas out of the remnants of past societies.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**Culture and Belief 52 (formerly History 1213). The American Evangelical Tradition from Jonathan Edwards to Jerry Falwell**
Catalog Number: 5888
_David Hempton (Harvard Divinity School)_
_Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12_

The purpose of the course is to investigate the evangelical tradition from its origins in the religious revivals of the eighteenth century to its contemporary role in American culture, society and politics. Notwithstanding its often stereotypical characterizations, the evangelical tradition is surprisingly eclectic and complex. A central objective of the course, therefore, is to explore that complexity in relation to gender, ethnicity, social class, and political culture. The course will make use of primary and secondary materials to shed light on evangelical theology, spirituality, and cultural expression in America and in a global context.

Note: Offered jointly with the Divinity School as 2358. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**Culture and Belief 53. Sacred and Secular Poetry - (New Course)**
Catalog Number: 98258
_Judith Ryan (Germanic Languages and Literatures; Comparative Literature)_
_Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15_

Tracing poetry from its origins in religious practice, the course examines the process of secularization and the ways in which modern poems retain traces of sacred texts. As poets
grapple with an increasingly secular world, the emergence of modernity is revealed in vivid ways. Class discussions will explore the extent to which reminiscences of the sacred form part of the deeper appeal of poetry and its ability to shape meaning in the modern world. 

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion**

Catalog Number: 3396 Enrollment: Limited to 160.

*Eric Rentschler (Germanic Languages and Literatures)*

*Half course (fall term). T., Th., at 10; screenings W., 4-6; and a weekly section to be arranged. EXAM GROUP: 12*

As thinking beings we consider the limits of human potential and wonder what is the worst. The Nazis obsess us because they were masters of extremity who brought to the world unprecedented violence, destruction, and murder. They were also masters of propaganda who engineered sophisticated techniques of mass manipulation; in this endeavor cinema and modern media assumed a seminal role. Why, this course asks, were films so essential to the Hitler regime and so captivating to German audiences of the Third Reich? What explains the continuing allure of what Susan Sontag once spoke of as "fascinating fascism"?

*Note:* Expected to be omitted in 2013–14. No knowledge of German required. An additional film screening will be held on Sundays, 1-3. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirements for Foreign Cultures or Literature and Arts B, but not both.

**Culture and Belief 55. Enlightenment Creations of the Self, Society, and Institutions - (New Course)**

Catalog Number: 14022

*James Engell (English; Comparative Literature)*

*Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12*

The Enlightenment creates modern ideas of the self, a just society, and reformed institutions. The course explores six interrelated developments: (1) taking nothing on authority, a spirit of critique examines knowledge, religion, and government; (2) the spread of general knowledge to populations of increasing literacy; (3) debates about human nature—naturally selfish or sympathetic, altered by race or gender, innate or learned? (4) new institutions for equity and justice, even using violent revolution; (5) efforts supporting abolition, women’s rights, and religious toleration; (6) self-consciousness in philosophy, art, and psychology. Thinkers include Pope, Montesquieu, Voltaire, Diderot, Johnson, Rousseau, Burke, Lessing, Gibbon, Smith, Kant, Burney, and Wollstonecraft.

*Note:* This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.
**Culture and Belief 56 (formerly English 193a). The Culture of Capitalism - (New Course)**

Catalog Number: 42449

Martin Puchner (English; Comparative Literature; Dramatic Arts)

*Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4*

The course asks how cultural products, including literature, theater and film have captured the spirit of capitalism—fuelling its fantasies, contemplating its effects, and chronicling its crises.

More than just an economic system, capitalism created new habits of life and mind as well as new values, forged and distilled by new forms of art. Core readings by Defoe, Franklin, O'Neill, Rand, Miller, and Mamet and background readings by Smith, Marx, Taylor, Weber, Keynes, and Hayek.

*Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.*

Cross-listed courses that satisfy the Culture and Belief requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.

- **Aesthetic and Interpretive Understanding 41 (formerly Literature and Arts C-30). How and What Russia Learned to Read: The Rise of Russian Literary Culture**
  [Aesthetic and Interpretive Understanding 42. Literature and Revolution: Great Books in Moments of Cultural Transformation]
  [Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
  [Ancient Near East 104. Babylon]
- **Anthropology 1795. The Politics of Language and Identity in Latin America**
- **Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe - (New Course)**
- **Classical Studies 165. Medicine in the Greco-Roman World**
- **Computer Science 105. Privacy and Technology**
  [Economics 1776. Religion and the Rise of Capitalism]
  [Ethical Reasoning 26. The Ethics of Atheism: Marx, Nietzsche, Freud]
- **Folklore and Mythology 90i (formerly Aesthetic and Interpretive Understanding 27). Fairy Tales and Fantasy Literature**
- **Folklore and Mythology 114. Embodied Expression/Expressive Body: Dance in Cultural Context**
- **History 1144 (formerly Historical Study B-19). The Renaissance in Florence**
  [History 1301. Western Intellectual History II: The Prehistory of Modern Thought]
- **History 1445. Science and Religion in American Public Culture**
- **History of Science 100. Knowing the World: An Introduction to the History of Science**
- **History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East**
- **Religion 40. Incarnation and Desire: An Introduction to Christianity**
- **Religion 110. Religion and International Politics**
- **Religion 1315. Prophecy, Ecstasy, and Dreams in Early Christian World**
  [Science of the Physical Universe 17 (formerly Science A-41). The Einstein Revolution]
[Slavic 148. Strange Russian Writers]
Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!
Societies of the World 33 (formerly Foreign Cultures 84). Tokyo
[Societies of the World 41 (formerly History 1050). Medieval Europe]
Sociology 155. Class and Culture
Studies of Women, Gender, and Sexuality 1258. Friends with Benefits?
*Studies of Women, Gender, and Sexuality 1424. American Fetish: Consumer Culture
Encounters the Other - (New Course)
The Modern Middle East 111 (formerly Islamic Civilizations 105). Culture and Society in Contemporary Iran

Empirical and Mathematical Reasoning

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Courses in Empirical and Mathematical Reasoning teach the conceptual and theoretical tools used in reasoning and problem solving, such as statistics, probability, mathematics, logic, and decision theory. Students develop the ability to apply abstract principles and theories to concrete problems. They also learn how to make decisions and draw inferences that involve the evaluation of data and evidence, and how to recognize when an issue cannot be settled on the basis of the available evidence. Students will become aware of the many mistakes that human beings are prone to making in their reasoning and come to understand how to avoid common pitfalls in inference-making.

Empirical and Mathematical Reasoning

Catalog Number: 37079
Bernhard Nickel (Philosophy), Gennaro Chierchia (Linguistics), and Stuart M. Shieber (Harvard School of Engineering and Applied Sciences)
Half course (spring term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14

What is meaning, and how do we use it to communicate? We address the first of these questions via the second, presenting an interdisciplinary approach to the study of human languages. We investigate language as the product of a natural algorithm, that is, a computational facility which grows spontaneously in our species and enables us to expose our thoughts and feelings. Our investigation uses formal models from logic, linguistics, and computer science. These models will also shed light on human nature and basic philosophical issues concerning language. Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.
Empirical and Mathematical Reasoning 13 (formerly Social Analysis 46). Analyzing Politics
Catalog Number: 3544
Kenneth A. Shepsle (Government)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
A commonsensical survey of rational theories of politics comprised of: (1) individual choice, (2) group choice, (3) collective action, and (4) institutions. The underlying theme is that politics may be described and understood as rational, goal-seeking behavior by citizens, politicians, bureaucrats, and interest groups in various settings. Students are encouraged to think deeply about current events, history, and public life generally, as well as to analyze the politics of private life--in families, clubs, firms, churches, universities, even Harvard Houses--since private politics, like public politics, may be understood in terms of rational behavior. Instruction is by lecture, small-group section interactions, and experiments.
Note: Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Catalog Number: 26591
Joseph D. Harris (Mathematics) and Benedict H. Gross (Mathematics)
Half course (spring term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3
This course has three objectives: to learn to calculate probabilities precisely, when we can; to learn how to estimate them, when we can’t; and to say exactly what we can and can’t infer from these calculations. The course is not mathematically demanding--we assume no mathematical background beyond high-school algebra--but the goal is serious: given that we’re asked every day to make consequential decisions on the basis of incomplete knowledge, an understanding of basic probability is an essential tool for life.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

Empirical and Mathematical Reasoning 15 (formerly Quantitative Reasoning 50). Medical Detectives
Catalog Number: 5707
Karin B. Michels (Harvard Medical School; Harvard School of Public Health)
Half course (fall term). M., 2-4, and a weekly section to be arranged. EXAM GROUP: 7, 8
Why is there confusion in the scientific community as to whether butter or margarine is worse for your health? How do epidemiologists find out whether cell phone use increases your risk for brain cancer? What is your risk of contracting diabetes? Discover how researchers draw on quantitative skills to detect causes of acute disease outbreaks and chronic diseases. This course introduces the techniques and methods for empirically based analyses, decisions, and actions in the context of current public health problems.
Note: This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

Catalog Number: 8782
Cassandra Wolos Pattanayak (Statistics)
Half course (fall term). Tu., Th., 2:30-4, and a weekly section to be arranged. EXAM GROUP: 16, 17
This course explores the statistical reasoning underlying everyday life: learn to inform ordinary decisions with statistical understanding and critically assess information reported in the news. Topics include the implications and validity of medical studies; the interpretation and common pitfalls of surveys and election polls; the motivation for diversifying stock portfolios; the strategies behind online dating websites; and the optimal design for wine tastings. The course also unravels fallacies and paradoxes that often mislead. Students will develop the ability to identify, appreciate, and question the frequent appeals to statistical principles encountered in real life.
Note: Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

Empirical and Mathematical Reasoning 17 (formerly Quantitative Reasoning 22).
Deductive Logic
Catalog Number: 2508
Warren Goldfarb (Philosophy)
Half course (fall term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3
The concepts and principles of symbolic logic: valid and invalid arguments, logical relations of statements and their basis in structural features of those statements, the analysis of complex statements of ordinary discourse to uncover their structure, the use of a symbolic language to display logical structure and to facilitate methods for assessing arguments. Analysis of reasoning with truth-functions (“and”, “or”, “not”, “if...then”) and with quantifiers (“all”, “some”). Attention to formal languages and axiomatics, and systems for logical deduction. Throughout, both the theory underlying the norms of valid reasoning and applications to particular problems will be investigated.
Note: This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

Empirical and Mathematical Reasoning 18. What are the odds?
Catalog Number: 54305
Andrew W. Murray (Molecular and Chemical Biology)
Half course (spring term). M., W., F., at 11, and a weekly section to be arranged. EXAM GROUP: 4
There is the mathematics behind statistics, and then there are the concepts - without a proper grasp of which you will all too likely fall prey to confusion, error, and even outright deception. This course will teach you a bit about the math, and a lot about the concepts. Take it and achieve enlightenment about such topics as the difference between probability and risk, the nature of statistical inference, and the connections between correlation and causation.
Note: This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

[Empirical and Mathematical Reasoning 19 (formerly Quantitative Reasoning 46). The Art of Numbers]
Catalog Number: 9479
**Alyssa A. Goodman (Astronomy)**

Half course (spring term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16

This course focuses on the insight into quantitative information offered by graphs, tables, charts, maps, and other illustrations. We analyze which of these tools are best for communicating what kinds of data, and why. Ideas about causality, approximation, statistical significance, credibility, and dimensionality will be addressed by analyzing real data and their display. Examples are drawn from epidemiology, astronomy, sports, social-science, finance, geography, politics and economics. Approximately one-half of the course material focuses on web, interactive, and live presentations of data. Textbooks include classic work by Edward Tufte.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

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Catalog Number: 4667  
David M. Cutler (Economics)

Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13

Health and medical care pervade every aspect of our lives. This course uses quantitative methods (graphical analysis, algebra, data analysis) to examine issues related to health, disease, and systems for delivering health care. Topics to be covered include differences in health between rich and poor countries, differences in types of medical care and who receives it, and the political context for reforming health care policy. Techniques for analysis will be developed and demonstrated in class and section. The course uses examples from a variety of international settings, but focuses mainly on health and health care in the US.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or United States in the World, but not both. This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

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Catalog Number: 94176  
Peter K. Bol (East Asian Languages and Civilizations) and Kirk P. Goldsberry (Center for Geographic Analysis; Michigan State University)

Half course (fall term). M., W., at 11 and a weekly section to be arranged. EXAM GROUP: 4

Maps are often the most effective way to stimulate spatial reasoning and provoke new understandings about our world’s phenomena. This course introduces contemporary map design, geographic informations systems (GIS) and spatial analysis; our emphasis will be on the concepts and techniques that empower new spatial insights into our world.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

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Cross-listed courses that satisfy the Empirical and Mathematical Reasoning Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.
Anthropology 1010. The Fundamentals of Archaeological Methods & Reasoning
Applied Mathematics 21a. Mathematical Methods in the Sciences
Applied Mathematics 21b. Mathematical Methods in the Sciences
Applied Mathematics 101. Statistical Inference for Scientists and Engineers
Computer Science 1. Great Ideas in Computer Science
Computer Science 20. Discrete Mathematics for Computer Science
Computer Science 50. Introduction to Computer Science I
Computer Science 171. Visualization
Economics 10 (formerly Social Analysis 10). Principles of Economics
Economics 1010a1. Microeconomic Theory - (New Course)
Economics 1010a2. Microeconomic Theory - (New Course)
Economics 1010b. Macroeconomic Theory
Economics 1011a. Microeconomic Theory
Economics 1011b. Macroeconomic Theory
Economics 1123. Introduction to Econometrics
Engineering Sciences 1. Introduction to Engineering Sciences
Engineering Sciences 50. Introduction to Electrical Engineering
Government 50. Introduction to Political Science Research Methods
*History of Science 125. "Moneyball" Nation: Science and the Making of Modern America - (New Course)
Mathematics Ma (formerly Mathematics Xa). Introduction to Functions and Calculus I
Mathematics Mb (formerly Mathematics Xb). Introduction to Functions and Calculus II
Mathematics 1a. Introduction to Calculus
Mathematics 1b. Calculus, Series, and Differential Equations
Mathematics 18 (formerly Mathematics 20). Topics from Single and Multivariable Calculus for Social Sciences
Mathematics 19a. Modeling and Differential Equations for the Life Sciences
Mathematics 19b. Linear Algebra, Probability, and Statistics for the Life Sciences
Mathematics 21a. Multivariable Calculus
Mathematics 21b. Linear Algebra and Differential Equations
Mathematics 23a. Linear Algebra and Real Analysis I
Mathematics 23b. Linear Algebra and Real Analysis II
Mathematics 25a. Honors Linear Algebra and Real Analysis I
Mathematics 25b. Honors Linear Algebra and Real Analysis II
*Mathematics 55a. Honors Abstract Algebra
*Mathematics 55b. Honors Real and Complex Analysis
Mathematics 101. Sets, Groups and Topology
Mathematics 154 (formerly Mathematics 191). Probability Theory
Physical Sciences 2. Mechanics, Elasticity, Fluids, and Diffusion
Physical Sciences 3. Electromagnetism, Circuits, Waves, Optics, and Imaging
Physical Sciences 12a. Mechanics from an Analytic, Numerical and Experimental Perspective - (New Course)
Physics 11a. Mechanics
Physics 11b. Electricity, Magnetism, and Waves
Physics 15a. Introductory Mechanics and Relativity
Physics 15b. Introductory Electromagnetism
Physics 15c. Wave Phenomena  
Physics 16. Mechanics and Special Relativity  
Psychology 1900. Introduction to Statistics for the Behavioral Sciences  
Societies of the World 24. Global Health Challenges: Complexities of Evidence-Based Policy  
*Sociology 156. Quantitative Methods in Sociology  
Statistics 100. Introduction to Quantitative Methods for the Social Sciences and Humanities  
Statistics 101. Introduction to Quantitative Methods for Psychology and the Behavioral Sciences  
Statistics 104. Introduction to Quantitative Methods for Economics

**Ethical Reasoning**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

Courses in Ethical Reasoning teach students to reason in a principled way about moral and political beliefs and practices, and to deliberate and assess claims for themselves about ethical issues. Students examine the competing conceptions and theories of ethical concepts such as the good life, obligation, rights, justice, and liberty with a focus on developing the ability to assess and weigh the reasons for and against adopting them to address concrete ethical dilemmas. Students in these courses may encounter a value system very different from their own that calls attention to their own ethical assumptions.

**Ethical Reasoning**

**Ethical Reasoning 11. Human Rights: A Philosophical Introduction**  
Catalog Number: 6441  
Mathias Risse (Harvard Kennedy School)  
Half course (spring term). M., W., at 2, and a weekly section to be arranged. EXAM GROUP: 7  
What are human rights? Why would individuals have such rights? How can rights be universal, and what rights are universal? How can human rights rhetoric be criticized? This course will approach these and related questions philosophically, but with an eye to international politics.  
*Note:* This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**[Ethical Reasoning 12. Political Justice and Political Trials]**  
Catalog Number: 5064  
Charles S. Maier (History)  
Half course (spring term). W., 2-4, and a weekly section to be arranged. EXAM GROUP: 7, 8  
Criminal trials have served throughout history to enforce revolutionary change, to impose conformity and stifle dissent, or, alternatively, to advance democracy. Students examine trials in their historical and moral context to weigh such issues as who can prosecute; can crimes be defined after the fact; can punishing speech be justified? Cases include Socrates, Louis XVI, General Dyer, the Soviet purges, Nuremberg, Eichmann, American cold-war hearings, and today’s international tribunals and truth commissions.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

Catalog Number: 6507
Richard Moran (Philosophy)
Half course (fall term). M., W., (F.), at 2, and a weekly section to be arranged. EXAM GROUP: 7

How is human freedom possible? Does acting freely mean acting in accordance with reasons or acting arbitrarily, or neither? Are values chosen, discovered, or invented? How is self-knowledge possible and how is it different from the knowledge of others? Specific issues to be discussed include: self-deception and bad faith; the nature of freedom and autonomy; subjectivity and our relation to others; rationality and irrationality. Readings, which will provide an introduction to a few of the major texts of Existentialism, will be drawn from Kant, Sartre, Dostoevsky, and various contemporary writers.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

[Ethical Reasoning 14 (formerly Moral Reasoning 33). Issues in Ethics]
Catalog Number: 2255
Thomas M. Scanlon (Philosophy)
Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12

Is pleasure the only ultimate good? Are individuals’ preferences the only basis for assessing the quality of their lives? What makes acts wrong? Is moral blame applicable only to agents who have free will? Should we accept moral relativism? Readings mainly from contemporary philosophers.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

Ethical Reasoning 15 (formerly Moral Reasoning 54). “If There is No God, All is Permitted:” Theism and Moral Reasoning
Catalog Number: 1321
Jay M. Harris (Near Eastern Languages and Civilizations)
Half course (spring term). M., W., (F.), at 12, and a weekly section to be arranged. EXAM GROUP: 5

This course will examine the ways in which a concept of God has informed Western moral discourse trying to help students engage the literature as they consider why one might think “if there is no God, all is permitted” and why one might think if there is a God, human moral achievement is impossible.

Note: Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

Ethical Reasoning 18 (formerly Moral Reasoning 78). Classical Chinese Ethical and Political Theory
Michael J. Puett (East Asian Languages and Civilizations; Study of Religion)

Half course (fall term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3

How should one make moral choices? What is the best way to live a moral life? How should the state be organized to best encourage proper human behavior? And what happens if the state comes to be formed as an empire? What are the proper moral ways to respond? Questions such as these were at the heart of classical Chinese philosophical debates. This course will be the study of how the classical Chinese thinkers wrestled with these questions and what responses they gave. As we will quickly see, the views that arose in China were among the most powerful and influential in human history. Regardless of whether one agrees with these views or not, they should be studied and taken seriously by anyone who cares about ethics and politics.

Note: This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

Ethical Reasoning 20 (formerly Humanities 11). Self, Serenity, and Vulnerability: West and East

Catalog Number: 2401

Michael J. Puett (East Asian Languages & Civilizations; Study of Religion) and Roberto Mangabeira Unger (Harvard Law School)

Half course (spring term). M., 1-3, and a weekly section to be arranged.

An inquiry into basic moral beliefs and their metaphysical assumptions in the high cultures of Western and Eastern civilizations. The background concern is our struggle, in philosophy, religion, and art, with nihilism: the fear that our lives and the world itself may be meaningless. The foreground theme is the contrast between two answers to the question about how to live one’s life: stay out of trouble and look for trouble. How speculative thought has dealt with the limits of insight into what matters most. Exemplary writings from several traditions: modern European, ancient Greek, Chinese, South Asian.

Note: Extended take-home examination. Offered jointly with the Law School as 2392. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.


Catalog Number: 7778

Susanna C. Siegel (Philosophy)

Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12

An examination of moral questions that arise in the context of social protest in the US during the 20th century, including the central question of political philosophy: How can political authority be justified? After studying the Attica prison revolt of 1971, we will consider the following questions: Is there an obligation to obey the law? What, if any, are the moral limits to this obligation? Can civil disobedience be justified, and does it always need to be? Texts include classic excerpts from Plato, Hobbes, Rawls, and Marx.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.
**Ethical Reasoning 22 (formerly Moral Reasoning 22). Justice**
Catalog Number: 3753 Enrollment: Limited to 1000.
*Michael J. Sandel (Government)*

Half course (fall term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4

A critical analysis of selected classical and contemporary theories of justice, with discussion of present-day practical applications. Topics include affirmative action, income distribution, same-sex marriage, debates about rights (human rights and property rights), arguments for and against equality, debates about political obligation and the claims of community. Readings include Aristotle, Locke, Kant, Mill, and Rawls.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

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**[Ethical Reasoning 24. Bioethics]**
Catalog Number: 72195
*Daniel I. Wikler (Harvard School of Public Health)*

Half course (spring term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14

Bioethics is the study of ethical issues arising in efforts to maintain and restore health, and, more broadly, with charting humankind’s future in an era of both technological advances and unmet need. We will try to reason our way through moral dilemmas that pit health against freedom, prevention against rescue, and the claims of those with competing needs when life itself hangs in the balance. The course will emphasize ethical issues involving health that arise at the global and population levels, particularly those involving peoples and regions with the greatest burden of disease.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

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**[Ethical Reasoning 26. The Ethics of Atheism: Marx, Nietzsche, Freud]**
Catalog Number: 12763
*Peter J. Burgard (Germanic Languages and Literatures)*

Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12

Examines the Western secular tradition through the work of three seminal figures whose critiques of religion-in social and political theory, philosophy, and psycho-analysis and anthropology-are motivated by ethical concerns. Introductory readings of Kant, Hegel, and Feuerbach ground analysis of Marx’s, Nietzsche’s, and Freud’s ethical atheism. Students do not develop or debate formulae for behavior, but rather become critically aware of ethical considerations that underlie actions and that are negotiated vis-a-vis prevailing moral codes. Readings include The German Ideology, The Communist Manifesto, The Gay Science, Beyond Good and Evil, On the Genealogy of Morals, The Anti-Christ, Three Essays on the Theory of Sexuality, Totem and Taboo, The Future of an Illusion.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or Culture and Belief, but not both. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.
[Ethical Reasoning 27 (formerly Moral Reasoning 28). Ethics and International Relations]
Catalog Number: 0642
Stanley Hoffmann (University Professor; Government) and J. Bryan Hehir (Harvard Kennedy School)
Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13
The course explores the problem of morality in international relations. Starting from an overview of different theoretical perspectives concerning moral argumentation in international affairs, it proceeds to consider the ethical dimensions of more specific international issues such as the use of force, human rights, and distributive justice. Contemporary cases will be used when relevant. Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

[Ethical Reasoning 28. Moral Inquiry in the Novels of Tolstoy and Dostoevsky]
Catalog Number: 27743
Justin Weir (Slavic Languages and Literatures)
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
This course considers how Tolstoy and Dostoevsky take up moral inquiry in their fiction, introduces students to philosophical texts that informed their major fiction, and asks why the novel as a literary genre may be a good forum for the discussion of ethics. We will read Tolstoy’s Anna Karenina, Dostoevsky’s Notes from Underground and The Brothers Karamazov, as well as selected texts from Rousseau, Schopenhauer, Nietzsche, and others. Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

[Ethical Reasoning 29. Social Theory, the Humanities, and Philosophy Now]
Catalog Number: 21034
Michael J. Puett (East Asian Languages & Civilizations; Study of Religion) and Roberto Mangabeira Unger (Harvard Law School)
Half course (spring term). Th., 5-7 p.m., and weekly section to be arranged. EXAM GROUP: 18
A sustained discussion of the obstacles and the opportunities that the established traditions of Western philosophy, social theory and the humanities present to those who see time as real, history as open, novelty as possible, and social and cultural transformation as imperative. The central theme is how thought deals with the creation of the new. Special attention to three European philosophers -- Hegel, Marx, and Bergson, as well as to those strands in contemporary philosophy and social thought that bear most closely on our concerns. No prerequisites other than willingness to consider a wide range of problems, materials, and ideas. Note: Expected to be given in 2013–14. Offered jointly with the Law School. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

[Ethical Reasoning 30. The Just World]
Catalog Number: 12206
Mathias Risse (Harvard Kennedy School)
Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
Globalization is changing the world. What do wealthy countries have to do to contribute towards the creation of a just world? We start by exploring different approaches to the question of
whether obligations of justice apply only to those who share a country. We will then assess whether the global order harms the poor. Next we look at human rights and ask whether liberal values should be promoted as universal human rights. We will complete the course by exploring three additional subjects: moral obligations arising from trade (specifically whether labor standards should be linked with human rights standards), immigration, and environmental justice.

*Note:* This course, when taken for a letter grade, meets Core area requirement for Moral Reasoning.

**Ethical Reasoning 31. The Philosopher and the Tyrant**

Catalog Number: 48904  
*David Damrosch (Comparative Literature)*

*Half course (fall term). M., 3-5, and weekly section to be arranged. EXAM GROUP: 8, 9*

Philosophers and politicians alike struggle to set the terms for living a good life in a world of conflict. How do court counselors and professional philosophers speak truth to power? How do rulers - and citizens like ourselves - weigh the competing demands of liberty and order, self-fulfillment and self-restraint? Moving from Plato and the Bible to responses to Hitler’s Meine Kampf, this course will examine particularly rich examples of relations between the pursuit of wisdom and the pursuit of power, from the extremes of conflict (the executions of Socrates, Jesus, Sir Thomas More) to the opposite dream of the philosopher king.

*Note:* This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**Ethical Reasoning 32. Security: Carefree or Careless - (New Course)**

Catalog Number: 83151  
*John T. Hamilton (Comparative Literature)*

*Half course (spring term). W., 3-5, and a weekly section to be arranged. EXAM GROUP: 8, 9*

The term "security" has enjoyed a complex and ambivalent career. Broadly defined as a "removal of care," security leaves its subjects either carefree or careless. Pursuing an itinerary from the Stoics to psychoanalysis, from international relations to feminist theory, the course draws out the ethical implications of the persistent concern to be free of concern. Does "security" make us vigilant or negligent, confident or complacent? Does it promote more fear than it assuages? Is a security purchased with freedom or human rights morally viable? Such questions broach a more informed, nuanced, and critical engagement concerning our civic, professional and personal lives.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**Ethical Reasoning 33. Medical Ethics and History - (New Course)**

Catalog Number: 46736  
*David Shumway Jones (History of Science; Harvard Medical School)*

*Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4*

Disease and medicine have generated ethical dilemmas that have challenged patients and doctors for centuries, from abortion and euthanasia to informed consent and compulsory treatment. Although moral philosophy can clarify the relevant issues, resolution often depends on the
details of the specific clinical and social contexts. Taking a historical approach to medical ethics, this class explores how the moral discourse in health care has changed over time in order to understand how social factors influence the persuasiveness of moral arguments. The focus will be on medical practice in the United States in the twentieth century.

Note: Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**Ethical Reasoning 34. Liberty - (New Course)**

Catalog Number: 80651

*James Hankins (History), Jeffrey A. Miron (Economics), and Eric M. Nelson (Government)*

Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15

What is liberty? What considerations justify taking away an individual’s freedom? All modern political philosophies and all forms of government claim to be liberating individuals or groups from oppression, but can these claims withstand critical scrutiny? Is power in the hands of the state the best way to secure the freedom and happiness of individuals? Beginning with an intellectual history of ideas of freedom in the Western tradition, the course proceeds to examine a series of issues and debates that invoke the value of freedom in the modern world: taxation, private property, public speech, and government attempts to shape and regulate the individual’s behavior and morality.

Note: This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**Ethical Reasoning 35. Nature - (New Course)**

Catalog Number: 35187 Enrollment: Limited to 54.

*Joyce E. Chaplin (History)*

Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15

Ethical relations among people have always implied (whether directly or covertly) a preferred connection between people and nature. This course offers a critical and historical analysis of selected texts that identify human beings as a distinctively ethical species within the natural world, with particular attention to the emergence of normative theories that rank people with and against other natural beings. Topics include: definitions of wilderness and property; social hierarchies based on "natural" differences; agriculture, modern science, industrialization, and consumer economies as historic redefinitions of the human place within nature; animal rights; and environmentalism and its critics.

Note: This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

Cross-listed courses that satisfy the Ethical Reasoning Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.

**Government 10. Foundations of Political Theory**

**Government 1060. Ancient and Medieval Political Philosophy**

**Government 1061. The History of Modern Political Philosophy**

[Government 1510. American Constitutional Law]
[History 1300. Western Intellectual History: Greco-Roman Antiquity]
[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]

Philosophy 168. Kant’s Ethical Theory
Philosophy 172. The History of Modern Moral Philosophy
[Philosophy 174. Recent Ethical Theory]
Philosophy 179. Race and Social Justice

United States in the World 20 (formerly Moral Reasoning 74). The Theory and Practice of Republican Government

Science of Living Systems

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Courses in Science of Living Systems teach central concepts, facts and theories in the life sciences and engineering, and relate them to problems of wide concern. These courses may explore a range of topics relating to understanding life -- its origins, the way it adapts to and changes the environment, and the ways in which human interventions can affect its trajectory. These courses provide students with the tools to evaluate scientific claims, consider alternative accounts for empirical findings, and appreciate the ambiguity that often surrounds such findings. Whenever possible, students examine the nature of experiments on living systems through laboratory, field, or other hands-on experiences.

Science of Living Systems

Science of Living Systems 11. Molecules of Life
Catalog Number: 9478
Jon Clardy (Harvard Medical School) and David R. Liu (Chemistry and Chemical Biology)
Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13

Molecules form the basis of heredity, govern how our bodies develop, allow us to respond to changes in our environment, and carry our thoughts. This course explores the roles of molecules through case studies of our bodies’ messengers, modern drugs, and the future of medicine. Examples include sexual development, metabolism, diabetes, nerve transmission, psychiatric disease, infectious disease, cancer, aging and stem cells. Students will connect to lecture material in discussion section through hands-on activities and role-playing scenarios.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Science of Living Systems 12. Understanding Darwinism
Catalog Number: 5523
Andrew Berry (Organismic and Evolutionary Biology)
Half course (fall term). Tu., Th., 10-11:30, and a weekly section/laboratory to be arranged. EXAM GROUP: 12, 13

An interdisciplinary exploration of Darwin’s ideas and their impact on science and society. The course links the history of Darwin’s ideas with the key features of modern evolutionary biology. Darwin’s celebrated book On the Origin of Species provided a compelling solution to one of...
Science’s most prominent problems—the origins of biological diversity and of our own species—and a whole new way of viewing the world. The course reviews the development of the main elements of the theory of evolution, highlighting the areas in which Darwin’s ideas have proved remarkably robust and areas in which subsequent developments have significantly modified the theory. By also analyzing the historical context of the development of evolutionary thought beyond Darwin, the course emphasizes the dynamic interplay between science and society.

Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Science B.

**Science of Living Systems 15 (formerly Science B-60). Developmental Psychology: Origins of Knowledge**

Catalog Number: 8280
Elizabeth S. Spelke (Psychology)
Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13

This course explores the origins and development of knowledge in the human child, in relation to two larger time scales: biological evolution and historical/cultural change. Drawing on evidence from experimental, comparative, and developmental psychology, cultural anthropology, linguistics, cognitive neuroscience, and history of science, it focuses on the development of knowledge of objects, number, space, language, agency, morality and the social world. Questions include: How does human biology constrain and support human cognition? How variable are human knowledge systems across different cultures and times? What aspects of knowledge are unique to humans? How does knowledge change as children grow and adults gain expertise?

Note: Students who have taken Psychology 16 may not take this course for credit. For Psychology concentrations, this course meets a Foundation Course requirement. This course, when taken for a letter grade, meets the Core area requirement for Science B.

**Science of Living Systems 16. Human Evolution and the Human Body**

Catalog Number: 0470
Daniel E. Lieberman (Human Evolutionary Biology)
Half course (spring term). Tu., Th., 1-2:30, and a 90-minute weekly section to be arranged. EXAM GROUP: 15, 16

How and why did humans evolve to be the way we are, and what are the implications of our evolved anatomy and physiology for human health in a post-industrial world? To address these questions, this course reviews the major transitions that occurred in human evolution, from the divergence of the ape and human lineages to the origins of modern humans. Also considered are the many effects of recent cultural and technological shifts such as agriculture and industrialization on human health.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Science B.

**Science of Living Systems 17 (formerly Science B-23). The Human Organism**

Catalog Number: 6581 Enrollment: Limited to 90.
Joseph D. Brain (Harvard School of Public Health) and Stephanie A. Shore (Harvard School of
Public Health
Half course (spring term). M., W., at 12, three two-hour laboratories, and periodic section meetings to explore special topics in depth. EXAM GROUP: 5
The physiology and pathology of the human body are presented with an emphasis on cardiovascular, respiratory, endocrine, and reproductive biology. Besides learning human biology, students will explore critical determinants of their own health as well as the health of diverse communities in rich and poor countries. Topics include the normal functioning of the human body and its responses to infection, injury, and environmental stress. We will analyze the relative power of diagnosis and treatment of disease (medicine) versus primary prevention of disease (public health) in promoting global health. Activities include classroom discussions and demonstrations, laboratories, and a directed term paper.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

[Science of Living Systems 18 (formerly Science B-65). Evolutionary Biology: Sex, Survival, and the Orgy of Species]
Catalog Number: 9680
Jonathan Losos (Organismic and Evolutionary Biology)
Half course (fall term). Tu., Th., 11:30-1, and a 90-minute weekly section to be arranged. EXAM GROUP: 13, 14
Five to ten million species roam the earth today—or maybe ten times that many. Where did these species come from? What processes regulate their diversity? We now know that Darwin’s theory of evolution by natural selection is correct, but many other processes also affect evolutionary change. Competition for mates is particularly important and evolutionary divergence of species is often driven by differences in reproductive biology. This course will examine theories of how evolution occurs, including runaway sexual selection, sperm competition, adaptive radiation, disruptive selection, sympatric speciation and host-parasite interactions.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science B.

Catalog Number: 50018 Enrollment: Limited to 250.
Christopher P. Duggan (Harvard Medical School; Harvard School of Public Health), Wafaie W. Fawzi (Harvard School of Public Health) and Clifford W. Lo (Harvard Medical School)
Half course (spring term). M., 3-5, and weekly section to be arranged. EXAM GROUP: 8, 9
This course will introduce students to nutrition and global health problems through exploration of demographic, epidemiological, biological, social, political, and economic determinants of nutritional status. Emphasis will be placed on the role of nutritional status and dietary intake, both as a determinant and as a consequence, of these health problems. Students will be encouraged to think critically about the major challenges to improve nutrition and health at a global level, with a focus on nutrition and infectious diseases, maternal and child health, and chronic diseases. Nutritional assessment, study design, and efficacy of nutrition interventions, will be explored in detail.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Science of Living Systems 20. Psychological Science
Catalog Number: 16308 Enrollment: Limited to 510. Limited enrollment for fall term only.
Fall: Daniel T. Gilbert (Psychology); Spring: Steven Pinker (Psychology)
Half course (fall term; repeated spring term). Fall: M., W., 1-2:30, and a weekly section to be arranged; Spring: Tu., Th., 2:30-4, and a weekly section to be arranged. EXAM GROUP: Fall: 6, 7; Spring: 16, 17
An introduction to the sciences of mind, including foundational concepts from neuroscience, evolution, genetics, philosophy, and experimental methods, and specific topics such as perception, memory, reasoning and decision-making, consciousness, child development, psychopathology, personality, language, emotion, sexuality, violence, morality and social relations.
Note: Students who have taken Science B-62 or Psychology 1 may not take this course for credit but may use those courses to satisfy the General Education requirement for Science of Living Systems or the Core area requirement for Science B. This course, as well as Science B-62 and Psychology 1, meet the Tier 1 requirement for Psychology. This course, when taken for a letter grade, meets the Core area requirement for Science B.

[Science of Living Systems 21. Evolutionary Medicine]
Catalog Number: 58084
Charles Nunn (Human Evolutionary Biology) and Peter Ellison (Human Evolutionary Biology)
Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13
Evolutionary medicine is a new field seeking to apply the principles of evolution to understanding human health and disease. This course will involve lectures and case studies. Lectures will focus on general principles including: elements of evolutionary theory; interpreting data in relation to specific hypotheses; major human infectious, chronic, and genetic diseases; and human anatomy and physiology in evolutionary perspective. Case studies will be chosen to illustrate these principles and will engage students in small discussion groups and independent research.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science B.

Science of Living Systems 22. Human Influence on Life in the Sea
Catalog Number: 42977
Robert M. Woollacott (Organismic and Evolutionary Biology) and James J. McCarthy (Organismic and Evolutionary Biology)
Half course (fall term). Tu., Th., 11:30-1, and a weekly two-hour section or lab to be arranged. EXAM GROUP: 13, 14
Many important marine fish stocks are over-harvested and their futures are in doubt. Other human activities, such as pollution and anthropogenic climate change, are also affecting the stability and productivity of marine ecosystems. This course will ask what we need to know about the causes and effects of anthropogenic change to best protect marine ecosystems and ensure sustainable harvests from the sea.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Catalog Number: 2635
Donald H. Pfister (Organismic and Evolutionary Biology) and Andrew Richardson (Organismic
Forests cover nearly one third of the earth’s land surface area. They provide a vast range of products and services to human civilization, and are important for economic and cultural reasons. This class will provide students with an introduction to the biology and ecology of forest ecosystems. An overarching theme throughout the course will be to understand how climate change will affect forests and the ecological services we derive from them, and in turn how forests can affect their own growth environment and climate change itself.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Cross-listed courses that satisfy the Science of Living Systems Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.

- Chemistry 27. Organic Chemistry of Life
- Life and Physical Sciences A. Foundational Chemistry and Biology
- Life Sciences 1a. An Integrated Introduction to the Life Sciences: Chemistry, Molecular Biology, and Cell Biology
- Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution
- Life Sciences 2. Evolutionary Human Physiology and Anatomy
- MCB 52. Molecular Biology
- MCB 54. Cell Biology
- MCB 80. Neurobiology of Behavior
- OEB 10. Foundations of Biological Diversity
- OEB 52. Biology of Plants
- Psychology 15. Social Psychology
- [Science of the Physical Universe 20. What is Life? From Quarks to Consciousness]
- Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the Brontosaurus and Beyond
- SCRB 10. Human Developmental and Regenerative Biology

Science of the Physical Universe

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Courses in Science of the Physical Universe teach scientific concepts, facts, theories, and methods in the physical sciences and engineering and relate them to problems of wide concern. These courses may explore discoveries, inventions, and concepts in the physical sciences that have led to or underlie issues affecting societies across the globe including reliance on fossil fuels, the exploration of space, the proliferation of nuclear weapons, climate change, and privacy in an age of digital communication. The courses provide students with the tools to evaluate scientific claims, consider alternative accounts for empirical findings, and appreciate the ambiguity that often surrounds such findings. Whenever possible, students examine the nature of experiments in the physical sciences and engineering through laboratory, field, or other hands-on experiences.
Science of the Physical Universe

Science of the Physical Universe 12 (formerly Science A-43). Natural Disasters
Catalog Number: 6001 Enrollment: Limited to 98.
Brendan J. Meade (Earth and Planetary Sciences)
Half course (fall term). Tu., Th., 10-11:30, and a 60- to 120-minute weekly lab section to be arranged. EXAM GROUP: 12, 13
Natural disasters, such as earthquakes, hurricanes, and floods, claim thousands of lives and cause tens of billions of dollars in damage each year. Moreover, changes in Earth’s climate are raising sea level, changing precipitation patterns, and likely causing an increase in the occurrence of damaging storms, putting more of our increasing exposed global population at risk. In this course we develop an understanding of these natural hazards from an earth science perspective, and examine several case studies to assess their catastrophic impacts. Given our scientific understanding of these phenomena, we examine ways to assess and forecast future natural disasters, and to mitigate the adverse impacts to our societies. Sections will emphasize the use of GIS technology to measure the impacts of natural hazards.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science A.

Catalog Number: 8987 Enrollment: Limited to 120.
Eric J. Heller (Chemistry and Chemical Biology; Physics)
Half course (spring term). M., W., 2:30-4, and a weekly section to be arranged. EXAM GROUP: 7, 8
Sound and music are integral parts of all human cultures, and play critical roles in communications and social interactions. In this course, we reach a high level of understanding for the production, transmission, and perception of sound, including psychoacoustics, with the aim of expanding communication, musical, and artistic horizons. The course is front loaded with class demos and hands on tools for the student to discover by exploring. Student selected projects (with staff consultation) are an important part of the course. The course book, written by the professor, Why You Hear What You Hear, is a full-fledged resource and guide.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science A.

Science of the Physical Universe 14 (formerly Science B-35). How to Build a Habitable Planet
Catalog Number: 7621
Charles H. Langmuir (Earth and Planetary Sciences)
Half course (fall term). M., W., F., at 11, and a weekly section to be arranged. EXAM GROUP: 4
The story of the Earth from the inception of the universe at the Big Bang to the revolution in planetary functioning associated with the rise of human civilization. The aim of the course is to place human beings in a universal and planetary context, and to see the steps in planetary evolution as an essential perspective on how we relate to the Earth today. Topics covered include the Big Bang, origin of the elements, formation of minerals, origin of the solar system, formation of planets, climate regulation, origin of life, co-evolution of ocean, atmosphere, solid earth and biosphere, development of plate tectonics, the modern Earth as an interconnected system, and the human era and its consequences for the planet. Finally we consider whether Earth may be a
microcosm reflecting laws of planetary evolution that may be common to a class of planets throughout the universe, or alternatively may be a low probability accident.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Catalog Number: 4562
Gerald Gabrielse (Physics)
Half course (spring term). M., W., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 4, 5

What flows from electrical wall sockets, cell phones, and power lines? What are the risks? How do magnetic resonance imaging, X-rays, and CT scans take pictures within our bodies, and with what danger? What are the lasers that inhabit grocery store checkout counters and CD players? What are atomic clocks? How have they and GPS satellites revolutionized navigation for backpackers and ships? How does Einstein’s famous formula describe the energy release from nuclei? What are nuclear reactors and nuclear waste? This quantitative study of the physics of daily life is intended to enable more informed choices in our society.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science A.

[Science of the Physical Universe 17 (formerly Science A-41). The Einstein Revolution]
Catalog Number: 3581
Peter L. Galison (University Professor; History of Science)
Half course (spring term). Tu., Th., 11:30-1, and a 90-minute weekly section to be arranged. EXAM GROUP: 13, 14

Albert Einstein has become the icon of modern science. Following his scientific, cultural, philosophical, and political trajectory, this course aims to track the changing role of physics in the 20th- and 21st- centuries. Addresses Einstein’s engagement with relativity, quantum mechanics, Nazism, nuclear weapons, philosophy, and technology, and raises basic questions about what it means to understand physics and its history.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Catalog Number: 0077
Gary J. Feldman (Physics)
Half course (fall term). M., W., 12:30-2, and a 90-minute weekly section to be arranged. EXAM GROUP: 5, 6

We study how our understanding of time and of related issues, such as the predictability of the future, have evolved over the past three centuries. We start with Newtonian mechanics, which envisions a universal time, symmetric between past and future. This leads to the concept of a clockwork universe. We then see how developments in the 19th and 20th centuries destroy this view of time. In the 19th century, the distinction between past and future emerges from considerations of statistical processes. In the 20th century, the theory of relativity forces fundamental changes in the concept of time. Time ceases to be universal and becomes entangled
with space and gravity. Quantum mechanics limits the predictability of the future and introduces verified effects so weird that Einstein wrote of them, "No reasonable definition of reality could be expected to permit this."

Note: Expected to be given in 2013–14. Some knowledge of secondary school physics useful, but not required. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Catalog Number: 5923 Enrollment: Limited to 325.
Robert P. Kirshner (Astronomy)
Half course (spring term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14
The nature and history of matter revealed by astronomical observation and experimental physics. Explores the Big Bang and models of the universe, stellar evolution and supernova explosions, evidence for invisible matter, and the development of structure in the universe. Demonstrates the physical principles used to interpret astronomical data and to construct a model for the evolution of the universe on the microscopic and cosmic scales. Examines the way microscopic properties of matter determine properties of people, stars, galaxies, and the universe as a whole.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science A.

[Science of the Physical Universe 20. What is Life? From Quarks to Consciousness]
Catalog Number: 84519
Logan S. McCarty (Chemistry and Chemical Biology), Andrew J. Berry (Organismic and Evolutionary Biology), and Melissa Franklin (Physics)
Half course (fall term). M., W., F., at 11, and a one-hour discussion and one-hour of hands-on laboratory per week to be arranged. EXAM GROUP: 4
This course views life through multiple lenses. Quantum physics involves uncertainty and randomness, and yet paradoxically it explains the stability of molecules, such as DNA, that encode information and are critical to life. Thermodynamics is about the universe’s ever increasing disorder, and yet living systems remain ordered and intact. This course will examine how these physical laws underpin life and how life itself has diversified since originating 3.5 billion years ago.
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Science of Living Systems, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A or Science B, but not both.

Catalog Number: 4775 Enrollment: Limited to 18.
Jonathan E. Grindlay (Astronomy)
Half course (spring term). M., W., 1-2:30, and one evening telescope laboratory session to be
arranged. EXAM GROUP: 6, 7
Direct measurements of the stars and Sun with telescopes at the Science Center to learn how we can understand our solar system, galaxy and the distant universe from stars, the basic building blocks and markers of cosmic evolution. In small sections, students conduct both visual and computer-assisted telescope observations to measure key properties of stars and formulate their own cosmic understanding from simple physical laws.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science A.

Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the Brontosaurus and Beyond
Catalog Number: 32997
Irwin I. Shapiro (University Professor; Astronomy; Physics)
Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3
Science is like well-woven, ever-expanding fabric, designed to (un)cover Nature’s secrets. This course emphasizes the strong connections between subfields of science, showing it as the never-ending and greatest detective story ever told, with evidence always the arbiter. These characteristics are exhibited in the semi-historical treatment of three themes: unveiling the universe, the earth and its fossils, and the story of life.
Note: This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Science of Living Systems, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A or Science B, but not both.

[*Science of the Physical Universe 24. Introduction to Technology and Society]*
Catalog Number: 14726 Enrollment: Limited to 60.
Venkatesh Narayanamurti (Harvard School of Engineering and Applied Sciences, Physics)
Half course (spring term). M., W., 2:30-4, and a weekly section to be arranged. EXAM GROUP: 7, 8
From the digital revolution to bio informatics, from global warming to sustainability, and from national security to renewable energy, technology plays a critical role in shaping our lives. In this course, the students will be exposed to applied science and engineering concepts that span disciplines and examine broadly how technology shapes society and vice versa. It will emphasize qualitative and semi-quantitative analysis, modeling and the conceptual basis of some of the grand challenges facing society.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Catalog Number: 1387
Michael B. McElroy (Harvard School of Engineering and Applied Sciences; Earth and Planetary Sciences)
Half course (spring term). M., W., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 6, 7
The course provides an historical account of the evolution of the modern energy system, from early dependence on human and animal power, to the subsequent use of wind and water, to more recent reliance on fossil fuels - coal, oil and natural gas - and even more recently to the
development of the ability to tap the energy contained in the nucleus. It will discuss the important historical advances in the applications of energy, notably in the production and distribution of electricity and in the transportation sector - where oil-derived products provide the motive force for cars, trucks, trains, ships and planes. It will highlight the energy related problems we confront today, with particular emphasis on air pollution, on the threat of global climate change, on the hazards of nuclear proliferation, and on the risks to national security imposed by our increasing reliance on imported sources of oil. It concludes with a discussion of options for a more sustainable energy future.

Note: Students who have taken Science A-52 may not take this course for credit. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Students are expected to have a background of high school algebra and trigonometry.

Catalog Number: 89089
John Huth (Physics)
Half course (fall term). M., W., 1-2:30, and a two-hour weekly section to be arranged. EXAM GROUP: 6, 7
We use the theme of primitive navigation to open the eyes of students to the physical world in a direct and palpable manner. Basic principles include human cognition of physical and mental maps, dead reckoning, direction finding from nature. The course includes the basics of astronomy, including planetary orbits, meteorology, thermodynamics, bird behavior, electromagnetic radiation, optics, waves, tides, ocean currents, and fluid dynamics. Navigational practices of Pacific Islanders, Norse, medieval Arabs, and early western Europeans provide a focus. Some facility with algebra and trigonometry is useful. A series of hands-on projects are employed to understand navigational practices discussed in lecture.

Note: Students who have taken Freshman Seminar 22f may not take this course for credit. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Science A or Quantitative Reasoning, but not both.

Catalog Number: 73191 Enrollment: Limited to 300.
David Weitz (Harvard School of Engineering and Applied Sciences) and Michael P. Brenner (Harvard School of Engineering and Applied Sciences)
Half course (fall term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16
This course is a collaboration between world-class chefs and Harvard professors. Each week, a chef will lecture about some aspect of gastronomy. This lecture will introduce and motivate a lecture about the science of soft materials by a Harvard professor. The course will cover the basic concepts in the science of soft materials, providing a solid understanding of their properties and behavior. All food is made of soft materials, and cooking relies on many of their fundamental properties. The course will also include laboratory work that uses concepts of
cooking to understand and motivate experimental measurements on soft materials.  

*Note:* Occasionally there will be an optional 15-30 minute question and answer session with visiting chefs. This course, when taken for a letter grade, meets the Core area requirement for Science A.


Catalog Number: 5565

*Mara Prentiss (Physics) and George M. Whitesides (University Professor; Chemistry and Chemical Biology)*

*Half course (fall term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3*

What we perceive as “reality” is the best effort of our senses to interpret a deeper, largely invisible, reality that is unnervingly strange. This course will survey the world of very small things, objects with dimensions of nanometers and micrometers. The behaviors of these objects are often entirely counterintuitive; they can also be quite useful. Micro- and nanostructures are the basis both of fundamentally new science, and of ubiquitous technologies: quantum dots, computers, the biological nanomotors that power muscle, buckyballs, tools for examining single mammalian cells, lasers. The course will describe these objects and how they function; it will also touch on issues of commercialization, economics, public policy, and ethics that spring from the avalanche of discovery and invention in this area.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science A.

**[Science of the Physical Universe 29. The Climate-Energy Challenge]**

Catalog Number: 79392

*Daniel P. Schrag (Earth and Planetary Sciences)*

*Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*

This course will examine future climate change in the context of Earth history, and then consider various strategies for what might be done to deal with it. The likely impacts of continued greenhouse gas emissions will be explored, emphasizing the scientific uncertainties associated with various predictions, and how this can be understood in the context of risk. In the latter third of the class, the question of how to mitigate climate change will be discussed, including an examination of various options for advanced energy systems.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science A.

**Science of the Physical Universe 30 (formerly Science A-54). Life as a Planetary Phenomenon**

Catalog Number: 5680 Enrollment: Limited to 400.

*Dimitar D. Sasselov (Astronomy)*

*Half course (spring term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14*

This course considers the relationship between life and the planet on which it resides. It examines the scientific quest to understand where life might thrive beyond Earth. On Earth, life was born of planetary processes and has been sustained by plate tectonics and other physical processes. Through evolution, life has in fact emerged as major influence on our planet’s surface.
Fundamental features of terrestrial life and evolution are addressed in the context of astronomy, planetary physics and chemistry. These, in turn, provide a basis for the exploration for other habitable planets, both within our solar system and in the greater universe.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Science A.

**Cross-listed courses that satisfy the Science of the Physical Universe Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.**

**Astronomy 16. Stellar and Planetary Astronomy**
**Astronomy 17. Galactic and Extragalactic Astronomy**
**Earth and Planetary Sciences 21 (formerly EPS 7). The Dynamic Earth: Geology and Tectonics Through Time**
**Earth and Planetary Sciences 22 (formerly EPS 5). The Fluid Earth: Oceans, Atmosphere, Climate, and Environment**
**Earth and Planetary Sciences 109. Earth Resources and the Environment**
**Earth and Planetary Sciences 133. Atmospheric Chemistry**
**Engineering Sciences 1. Introduction to Engineering Sciences**
**Engineering Sciences 6. Environmental Science and Technology**
**Engineering Sciences 50. Introduction to Electrical Engineering**
**Physical Sciences 1. Chemical Bonding, Energy, and Reactivity: An Introduction to the Physical Sciences**
**Physical Sciences 2. Mechanics, Elasticity, Fluids, and Diffusion**
**Physical Sciences 3. Electromagnetism, Circuits, Waves, Optics, and Imaging**
**Physical Sciences 10. Chemistry: A Microscopic Perspective on Molecules, Materials, and Life**
**Physical Sciences 11. Foundations and Frontiers of Modern Chemistry: A Molecular and Global Perspective**
**Physical Sciences 12a. Mechanics from an Analytic, Numerical and Experimental Perspective - (New Course)**
**Physics 11a. Mechanics**
**Physics 11b. Electricity, Magnetism, and Waves**
**Physics 15a. Introductory Mechanics and Relativity**
**Physics 15b. Introductory Electromagnetism**
**Physics 15c. Wave Phenomena**
**Physics 16. Mechanics and Special Relativity**
**Physics 123. Laboratory Electronics**
**Physics 125. Widely Applied Physics**

**Societies of the World**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

Courses in Societies of the World provide students with an international perspective by acquainting them with values, customs, and institutions that differ from their own, and help students to understand how different beliefs, behaviors, and ways of organizing society come into being. These courses may focus primarily on a single society or region, or they may address topics that transcend national boundaries, analyzing the flow and transformation of money,
goods, people, resources, information, or ideas between and among different societies. The courses may take a variety of disciplinary approaches, and may treat topics from a contemporary perspective or a historical one. Students will develop an awareness of the diversity of ways in which human beings have organized their social existence.

**Societies of the World**

[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]

Catalog Number: 5243

Peter K. Bol (East Asian Languages and Civilizations) and William C. Kirby (History)

Half course (fall term). M., W., F., at 11, and a weekly section to be arranged. EXAM GROUP: 4

Modern China presents a dual image: a society transforming itself through economic development and social revolution; and the world’s largest and oldest bureaucratic state, coping with longstanding problems of economic and political management. Whatever form of modern society and state emerges in China will bear the indelible imprint of China’s historical experience, of its patterns of philosophy and religion, and of its social and political thought. These themes are discussed in order to understand China in the modern world, and as a great world civilization that developed along lines different from those of the Mediterranean.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A or Foreign Cultures, but not both.

[Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World]

Catalog Number: 5373

Andrew Gordon (History) and David Howell (East Asian Languages and Civilizations)

Half course (spring term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3

Japan is a collection of islands, but its past and present unfolds through continuous interaction with wider worlds. This course places Japan in contexts of Asian and global history. It begins with the people, institutions, and ideas of premodern Japan, from the emergence of a court-centered state 1500 years ago to a warrior-dominated society centuries later. We then examine the tumultuous process of change from the 19th century through the present and explore how people in Japan have dealt with the dilemmas of modernity that challenge us all.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A or Foreign Cultures, but not both.

[Societies of the World 14 (formerly Historical Study A-88). The British Empire]

Catalog Number: 9910

Maya Jasanoff (History)

Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3

Less than a century ago the British Empire ruled a quarter of the world. This course surveys the empire’s extraordinary rise and fall from the American Revolution to World War II. Course presents a narrative of key events and personalities, introduces major concepts in the study of
British imperial history, and considers the empire’s political and cultural legacies for the world today. Includes multimedia presentations, digital exercises, and works by Niall Ferguson, Linda Colley, Rudyard Kipling, and Mahatma Gandhi.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Catalog Number: 6974
Jorge I. Domínguez (Government)
Half course (fall term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3
Focus on the insurrectionary war, the consolidation of power, Fidel Castro’s role, the role of organized labor and the peasantry, the US-Cuban conflict, the alliance with the Soviet Union, the choice of economic strategy, the “remaking of human beings,” the role of intellectuals, and the support for revolutions in Africa and Latin America. The instructor debates himself, presenting two or more views on each topic. Readings include original documents in translation.
Note: Expected to be given in 2013–14. Sections offered in English or Spanish. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B or Foreign Cultures, but not both.

[Societies of the World 18 (formerly History 1205). Europe Since the Second World War]
Catalog Number: 4588
Mary D. Lewis (History)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
Considers the political, economic, social and cultural development of Europe since the end of the Second World War. Examines post-war reconstruction; decolonization and the Cold War; the development of social democracy, new social movements, and the welfare state; the birth and expansion of the European Union; the emergence and importance of “immigrant politics” and new extreme-right movements; the events of 1989 and their significance.
Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[Societies of the World 19. Western Ascendancy: The Mainsprings of Global Power from 1600 to the Present]
Catalog Number: 77527
Niall Ferguson (History)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
From the scientific revolution to the industrial revolution, from representative government to the consumer society, from capitalism to nationalism and socialism, the ideas and institutions of "the West" (meaning Europe and its colonies of settlement) came to dominate the world in the five centuries after around 1500. But what were the mainsprings of Western power? Taking a comparative historical approach, this course seeks to identify the key economic, cultural, social,
political and military differences between the West and "the Rest."

**Note:** Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[Societies of the World 21 (formerly Foreign Cultures 63). China’s Two Social Revolutions]
Catalog Number: 1884
Martin K. Whyte (Sociology)
*Half course (spring term). M., W., at 1, and a weekly section to be arranged. EXAM GROUP: 6*
A general overview of the patterns of social life in China and how these have changed since the revolution in 1949. The socialist transformations led by Mao Zedong after 1949 and the market and other reforms led by Deng Xiaoping after Mao’s death receive equal emphasis. Topics covered include political institutions, work organizations, village life, cities, religion, family life, population control, gender relations, inequality, and schooling.

**Note:** Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

[Societies of the World 22. Asia in the Making of the Modern World]
Catalog Number: 26005
Shigehisa Kuriyama (East Asian Languages and Civilizations), Ian J. Miller (History), and Parimal Patil (Study of Religion; South Asian Studies)
*Half course (spring term). Tu., 11:30-1, and a two-hour section to be arranged. EXAM GROUP: 13, 14*
This course spotlights familiar aspects of everyday life in contemporary America, and reveals how a deeper understanding of them often requires study of peoples and events in distant places and times. In addition to making startling discoveries about global history, students will also learn the creative use of electronic databases and archival resources, and gain experience with multimedia presentations (mini-documentaries, podcasts).

**Note:** This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Catalog Number: 92634 Enrollment: Limited to 180.
Sue J. Goldie (Harvard School of Public Health)
*Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3*
This course introduces the global health challenges posed by failure to adequately reduce infections, malnutrition, and maternal-child health problems in the most vulnerable populations, escalating rates of non-communicable diseases/injuries, and emerging health risks that cross national boundaries. We will assess social responses to these challenges at the community, national, and global levels. Through an understanding of population health measures, we will examine patterns of disease/mortality between and within countries, capture important time trends, and identify determinants of health inequalities. While emphasizing science driven policy, comparative case examples will illuminate influential systemic factors, health system
performance, and the economic/social/political climate. 

*Note:* This course, when taken for a letter grade, meets the General Education requirement for either Societies of the World or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis or Quantitative Reasoning, but not both.

**Societies of the World 25 (formerly Anthropology 1825). Case Studies in Global Health: Biosocial Perspectives**

Catalog Number: 9587

Arthur M. Kleinman (Anthropology; Harvard Medical School), Paul E. Farmer (University Professor; Harvard Medical School; Harvard School of Public Health), Anne Becker (Harvard Medical School), and Salmaan Keshavjee (Harvard Medical School)

Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13

Examines, through lectures and case-based discussions, a collection of global health problems rooted in rapidly changing social structures that transcend national and other administrative boundaries. Students will explore case studies (addressing AIDS, tuberculosis, mental illness, and other topics) and a diverse literature (including epidemiology, anthropology, history, and clinical medicine), focusing on how a broad biosocial analysis might improve the delivery of services designed to lessen the burden of disease, especially among those living in poverty. 

*Note:* Course counts as Social Anthropology. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.


Catalog Number: 5568

Caroline M. Elkins (History)

Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13

Understanding Africa as it exists today requires an understanding of the broader historical trends that have dominated the continent’s past. This course will provide an historical context for understanding issues and problems as they exist in contemporary Africa. It will offer an integrated interpretation of sub-Saharan African history from the middle of the 19th century and the dawn of formal colonial rule through the period of independence until the present time. Particular emphasis will be given to the continent’s major historical themes during this period. Selected case studies will be offered from throughout the continent to provide illustrative examples of the historical trends.

*Note:* This course fulfills the AAAS 11, Introduction to African Studies, course requirement for a concentration or secondary field in African and African American Studies. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A or Foreign Cultures, but not both.

**[Societies of the World 27 (formerly Historical Study A-75). The Two Koreas]**

Catalog Number: 0786

Carter J. Eckert (East Asian Languages and Civilizations)
Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
This course seeks to provide a broad historical context in which to understand the contemporary political division on the Korean peninsula. It examines key historical forces that have created and shaped the two Koreas before, during, and after the actual partition of the country in 1945. Topics include nascent nation-building efforts between 1876 and 1910, the impact of Japanese colonialism and the Cold War, and North/South development and interaction after 1948. The course interweaves political, socioeconomic, and cultural themes within an historical framework centered on nation-building while also highlighting a number of major historiographical issues in modern Korean history.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[Societies of the World 28. Exploration and Empire Building]
Catalog Number: 47498
Kelly A. O’Neill (History)
Half course (fall term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3
This course studies the relationships between scientific study, aesthetic representation, and imperial power. Students will examine documentary and visual records of encounters between indigenous peoples, agents of rival empires, and the physical environment along the vast Siberian and Pacific frontiers.
Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engages substantially with the Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Catalog Number: 3196
David L. Carrasco (Harvard Divinity School; Anthropology)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
Explorations of the mythical and social origins, glory days and political collapse of the Aztec Empire and Maya civilizations followed by study of the sexual, religious and racial interactions of the “Great Encounter” between Mesoamerica and Europe. Focus on the archaeology, cosmovision, human sacrifice, divine kingship, the mystery of 2012 and rebellion in Mesoamerican cities and in colonialism. Hands-on work with objects at the Peabody Museum aid in examining new concepts of race, nation and the persistence of Moctezuma’s Mexico in Latino identities in the Mexico-US Borderlands.
Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

Societies of the World 31. Political Economy After The Crisis
Catalog Number: 80232
Dani Rodrik (Harvard Kennedy School) and Roberto Mangabeira Unger (Harvard Law School)
Half course (spring term). W., 1-3, and a weekly section to be arranged. EXAM GROUP: 6, 7
Alternative ways of thinking about contemporary market economies and their reconstruction, explored in three contexts: the recent worldwide financial and economic crisis and the struggle for recovery, the effort to advance socially inclusive economic growth in richer as well as in poorer countries, and the character and consequences of globalization. In considering these substantive themes, we also explore the nature of economics as a discipline: its past, present, and future. Students should have some acquaintance with economics, but no advanced training is required. Addressed to undergraduate and graduate students outside as well as within economics. 

Note: Extended take-home examination. Offered jointly with the Kennedy School as PED-233 and the Law School as 2390. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**Societies of the World 33 (formerly Foreign Cultures 84). Tokyo**

Catalog Number: 9691  
**Theodore C. Bestor (Anthropology)**  
*Half course (spring term). M., W., (F.), at 1, and a weekly section to be arranged. EXAM GROUP: 6*

Tokyo has been one of the world’s great metropolitan centers since the 17th century, both the urban hub of Japanese society and culture, and the place where Japanese domestic society and global influences have intersected. This course examines trajectories of change in Tokyo’s urban culture, lifestyles, social structure, and spatial environment across the city’s history, using ethnography, history, literature, diaries, architecture, photography, art, cartography, animation, film and the Internet to explore Tokyo as an urban culture in comparative perspectives drawn from anthropology, history, and other social sciences.

Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or Culture and Belief, but not both. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation**

Catalog Number: 6357  
**Orlando Patterson (Sociology)**  
*Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

Caribbean societies are largely the economic and political creations of Western imperial powers and are among the earliest products of globalization. Though in the West, they are only partly of it, and their popular cultures are highly original blends of African, European and Asian forms. The course examines the area as a system emerging through genocide, piracy, plantation slavery, colonialism and globalization, from a situation of great social and cultural diversity to the present tendency toward socio-economic and cultural convergence. Patterns of underdevelopment and government are explored through national case studies (Puerto Rico, Cuba, Jamaica & Haiti) and selected, region-wide modern issues (hurricanes, earthquakes and other natural disasters; migration & transnationalism; crime & drug trafficking), as are cultural adaptations through studies of Afro-Caribbean religions, folkways, and music. America’s special role in the region is emphasized.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.
[Societies of the World 35. Conditional Equality: The Case of the Jews of Europe in Modern Times]
Catalog Number: 88298
Jay M. Harris (Near Eastern Languages and Civilizations)
Half course (fall term). M., W., (F.), at 12, and a weekly section to be arranged. EXAM GROUP: 5
This course is a study in the relations between majorities and minorities in modern Europe, using the Jews as a focus. It will examine the ways in which the equal status of a minority is negotiated through cultural and political interaction, both subtle and blunt. It will further focus on the role that such negotiations have in the formation of identities of both the majority and the minority. Finally, it will examine the ways in which majorities can exercise control over minorities rendering them conditionally rather than fully equal participants in the national projects of the age.
Note: Expected to be given in 2013–14. Students who have taken Historical Study A-44 may not take this course for credit. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Societies of the World 36 (formerly Historical Study A-16). Modern India and South Asia
Catalog Number: 9058
Sugata Bose (History) and Amartya Sen (University Professor; Economics)
Half course (fall term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3
This course provides the historical depth and the comparative context in which to understand contemporary South Asia through an historical inquiry into the making and multiple meanings of modernity. It explores the history, culture, and political economy of the subcontinent which provides a fascinating laboratory to study such themes as colonialism, nationalism, partition, the modern state, economic development, refashioning of religious identities, center-region problems and relations between Asia and the West. Significant use of primary written sources (in English) and multi-media presentations.
Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A or Foreign Cultures, but not both.

[Societies of the World 37 (formerly Historical Study A-89). The Chinese Overseas]
Catalog Number: 7869
Michael A. Szonyi (East Asian Languages and Civilizations)
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
This course introduces the emigration of people from China to other parts of the world over the last five centuries. It considers the causes of emigration, the ties that emigrants retained to China, and the communities that Overseas Chinese created abroad. It compares the experiences of emigrants and their descendants in Southeast Asia and in North America. Last, it tries to situate the recent wave of Chinese migration to North America in global and historical context.
Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.
Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt
Catalog Number: 36776
Peter Der Manuelian (Near Eastern Languages and Civilizations; Anthropology)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
Surveys ancient Egyptian pharaonic civilization. Emphasizes Egyptian material culture: pyramids, temples, tombs, settlements, and artifacts. Explores major developmental themes that defined the Egyptian state: the geographical landscape, kingship, social stratification, and religion. Follows a chronological path with excursions into Egyptian art, history, politics, religion, literature, and language (hieroglyphs). Also touches on contemporary issues of object repatriation, archaeology and cultural nationalism, and the evolution of modern Egyptology. Includes field trips to the Egyptian collections of the Peabody Museum and the Museum of Fine Arts, Boston, along with immersive 3D computer models in Harvard’s Visualization Center. No prior experience in Egyptology expected.
Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Societies of the World 40 (formerly Anthropology 1174). The Incas: The Last Great Empire of Pre-Columbian South America
Catalog Number: 5311
Gary Urton (Anthropology)
Half course (fall term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16
This course guides students on an exploration of the largest and most complex civilization of Pre-Columbian America—the Inca Empire of Andean South America. We will address such questions as how did a civilization emerge and thrive at 12,000 feet above sea level? How could a state-level society exist without markets, the wheel, or writing? In addition to lectures and discussions, students will experience the products of Inca civilization through hands-on study of artifacts in the Peabody Museum of Archaeology and Ethnology.
Note: Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

[Societies of the World 41 (formerly History 1050). Medieval Europe]
Catalog Number: 4278
Michael McCormick (History)
Half course (fall term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
This course will examine the emergence of medieval civilization from the ruins of the ancient world, and the evolution of that civilization into modern Europe. Themes include: the fall of Rome, the spread of Christianity, the rise and fall of Byzantium, the challenge of Islam, the Vikings, the Crusades, commerce and agriculture, the Feudal Revolution, the Twelfth Century Renaissance, spirituality and persecution, the origins of law and government, the Black Death, and the Italian Renaissance.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or Culture and Belief, but not both.
This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**Societies of the World 42. The World Wars in Global Context, 1905-1950**
Catalog Number: 98327
Charles S. Maier (History)
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
Examines the origins, military history, and successive postwar settlements of World Wars I and II in the framework of evolving empires, fascist, communist, and democratic ideological mobilization, forced resettlement and cultures of mass violence, ongoing economic and social change (and persistence). Attention to Asian and African as well as European and American transformations.
*Note:* Students who have taken Historical Study B-53 or Historical Study B-54 may not take this course for credit. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

[**Societies of the World 43 (formerly Historical Study B-67). Japan’s Samurai Revolution**]
Catalog Number: 4164
Ian J. Miller (History)
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
On July 8, 1853, Commodore Mathew C. Perry steamed into Japan’s Edo Bay with four heavily armed US Navy warships. Two were the so-called “black ships,” ominously painted coal-burning steamships of the latest design. There, within view of a stunned populace, Perry issued an ultimatum: open the country to trade or face unstoppable bombardment. Thus began Japan’s modern engagement with the outside world, a new chapter in the broader encounter between “East” and “West.” Through primary sources, discussion and lecture, this course examines Japan’s rapid development from samurai-led feudalism into the world’s first non-Western imperial power.
*Note:* Expected to be given in 2013–14. No Japanese language skills required. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**Societies of the World 44. Human Trafficking, Slavery and Abolition in the Modern World**
Catalog Number: 70642
Orlando Patterson (Sociology)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
This course surveys the nature, types and extent of modern servitude, distinguishing broadly between those resulting from international trafficking such as trans-national prostitution, human smuggling into bonded labor, child soldiering and organ trafficking, and more intra-national forms such as debt-bondage and the domestic exploitation of women and other vulnerable groups. Examines the conceptual and theoretical issues raised in attempts to distinguish among these types of differential power relations; the empirical difficulties of estimating the magnitude
of what are inherently secretive processes; and the ideological controversies surrounding the subject. Explores ethical, socio-political and practical issues raised by these trends.

Note: This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

[Societies of the World 45 (formerly Chinese History 118). Beyond the Great Wall: China and its Nomadic Other]
Catalog Number: 6134
Mark C. Elliott (East Asian Languages and Civilizations)
Half course (fall term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16

The interaction between sedentary and nomadic civilizations is one of the great themes of human history. This course focuses on the classic case of relations between China and Inner Asia from ancient times to the 21st century. Approaching the problem from historical and theoretical perspectives, the course addresses the political, economic, social, and cultural dimensions of the storied Great Wall frontier.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[Societies of the World 46 (formerly Anthropology 1621). The Anthropology of Arabia]
Catalog Number: 89167
Steven C. Caton (Anthropology)
Half course (fall term). Tu., Th., at 9, and a weekly section to be arranged. EXAM GROUP: 11

The Arabian Peninsula (Saudi Arabia, the Gulf States, Oman and Yemen) is the focus of this course. Among topics to be addressed are: tribal organization and its continuing importance; gender relations; varieties of Islam and their influence; old and new forms of urbanism. Primary reading materials are ethnographic.

Note: No background in anthropology or Middle East studies required. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

[Societies of the World 47. Contemporary South Asia: Entrepreneurial Solutions to Intractable Social & Economic Problems]
Catalog Number: 85573
Tarun Khanna (Harvard Business School)
Half course (fall term). M., W., 3:30-5, and a weekly section to be arranged. EXAM GROUP: 8, 9

South Asia is home to two of the world’s seven billion people. The primary objective of the course is to engage students with the modern day challenges affecting South Asia, and to examine a range of entrepreneurial attempts to solve these problems. The course focuses on several categories of social and economic problems faced by the countries of South Asia, with specific focus on the realms of Education, Health, and Financial Inclusion. The goal is to understand ways in which entrepreneurial action can effectively tackle major socioeconomic problems in South Asia, by combining knowledge of historical causes, qualitative and
quantitative evidence, and context-specific knowledge of the commonalities and differences across South Asian countries. No prior knowledge of South Asia is required.

Note: Unlike other General Education courses, this course assumes advanced coursework in a relevant social science and thus is open to freshmen and sophomores only with permission of the instructor. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis. The course is designed for advanced undergraduates as well as graduate students from all parts of the University. Offered jointly with the Business School as 1266, the School of Public Health as GHP 568, the Kennedy School as PED-338, and the Graduate School of Education as A-819.

Catalog Number: 5906
Lawrence H. Summers (University Professor; Economics) and Robert Z. Lawrence (Harvard Kennedy School)
Half course (spring term). M., W., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 6, 7
Course will cover the economics and politics of globalization across an array of topics: international trade, development assistance, international financial flows, global warming, immigration/labor mobility, foreign investment. Within each topic we will discuss three elements: what are the important issues, illuminating the economic analytics crucial to understanding the topic; who plays a role in each of the issues to understand the motivations and constraints facing the actors engaged in globalization.

Note: Jointly offered with the Kennedy School as ITF-225. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Societies of the World 49. The Worlds of Business in Modern China - (New Course)
Catalog Number: 29129 Enrollment: Limited to 54.
William C. Kirby (History; Harvard Business School)
Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
China was home to the world’s largest economy two centuries ago. Two decades from now, it will be the world’s largest economy again. This course uses business as a lens through which to study modern China. Using new Harvard Business School cases, we explore traditional family firms and internet startups; state-owned enterprises and their private-sector challengers; and the catalytic role of Hong Kong, Taiwan, and foreign enterprise in shaping contemporary China. Case studies cast light on larger themes: the role of party and government (national and local) in business and society; the legal environment; and the global impact of China’s development.

Note: This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Cross-listed courses that satisfy the Societies of the World Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.

African and African American Studies 20. Introduction to African Languages and Cultures
[Ancient Near East 104. Babylon]
Courses in United States in the World examine American social, political, legal, cultural, and/or economic practices, institutions, and behaviors from contemporary, historical, and/or analytical perspectives. These will help students to understand this country as a heterogeneous and multifaceted nation situated within an international framework by examining ideas about what it means to be an American, about the persistence and diversity of American values, about the relations among different groups within the United States and between the United States and the rest of the world. Courses may compare the American situation to other societies of the world, or show change over time within the United States. These courses prepare students for civic agency by providing critical tools to understand these issues in a historical and/or comparative context.

United States in the World

United States in the World 11. American Health Care Policy
Catalog Number: 4045
Richard Frank (Harvard Medical School)
Half course (fall term). M., W., 3:30-5, and a weekly section to be arranged. EXAM GROUP: 8,
Health care in America poses fundamental policy challenges to our ability to protect low income Americans from the costs of illness; to produce high quality care; to efficiently use health care resources, and to allow Americans to die without pain, in the company of family, as they desire. This course aims to offer students a solid understanding of the American health care system, the potential impact of new reform legislation, and challenges that will remain in the future. 

Note: Students who have taken General Education 186 or Extra-Departmental Courses 186 may not take this course for credit. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.


Catalog Number: 8937
Jennifer L. Roberts (History of Art and Architecture)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
An introduction to early American art from a transnational, cross-cultural perspective. We begin with the global struggle for control of the North American continent, tracing the colliding artistic traditions of multiple European colonial powers, Native American groups, and slave cultures. We then examine the cultural constitution of U.S. nationhood as it developed through (and against) the visual and material cultures of Europe and the Atlantic and Pacific worlds. Icons of a seemingly familiar national heritage—such as Washington’s portrait on the dollar bill—are revealed as complex formal negotiations emerging from international dynamics of commerce, politics, religion, science, and migration.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B or Historical Study B, but not both.

[United States in the World 13 (formerly Historical Study A-34). Medicine and Society in America]

Catalog Number: 1552
Jeremy Alan Greene (History of Science)
Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
Surveys major developments in the history of American medicine since 1500. Emphasis on setting the practice of medicine and the experience of health and disease into broad social, cultural, and political contexts. Topics include the social and cultural impact of epidemic disease; the nature of demographic and epidemiological change; the development of medical therapeutics and technologies; the growth of health care institutions; the rise of the medical profession; and debates about the allocation of health care resources. Evaluates the role of medicine in addressing social needs as well as the social and economic determinants of patterns of health and disease.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]
Catalog Number: 0916
Jennifer L. Hochschild (Government; African and African American Studies)
Half course (fall term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3
Is a fundamental transformation occurring in the American racial order? If so, are these changes for the better or the worse? We first briefly explore the history of American racial and ethnic dynamics, then examine four transformative forces: immigration, multiracialism, genomics, and the movement of young adults into political and economic power. We then consider blockages to transformation: incarceration of young black men, wealth disparities, and treatment of Muslims and undocumented immigrants. We conclude by considering various ideal futures for race and ethnicity in the U.S.
*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Catalog Number: 4182
Nancy F. Cott (History)
Half course (fall term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
This course offers historical perspective on the social relations and relative power of the sexes, tracing changes and continuities over the past century in family lives, work, popular culture and politics. We will look at sexuality, masculinity, and femininity, centering these in US social, cultural and political history in the context of a wider world.
*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Catalog Number: 1885
Stephen A. Marglin (Economics)
Half course (fall term). M., W., (F.), 1-2:30, and a weekly section to be arranged. EXAM GROUP: 6, 7
This course critically examines the assumptions of modern economics and how these assumptions mold the ideas and conclusions of the discipline. A principal question is the appropriate scope of the market. This question will be examined both theoretically and through examples drawn from both microeconomics and macroeconomics; possible examples include health care, the environment, international trade, social security, and financial crisis and unemployment.
*Note:* Expected to be given in 2013–14. Primarily taught in lectures, with section meetings offering a chance both to clarify concepts and to discuss applications. Calculus is not used, and there is no mathematics prerequisite. Unlike Economics 10, this course does not fulfill the introductory course requirement for the Economics Department. Moreover, most upper level courses in Economics normally require Economics 10 as a prerequisite; without this prerequisite,
enrollment is at the discretion of the instructor. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**[United States in the World 18. Thinking About the Constitution]**

Catalog Number: 11083 Enrollment: Limited to 150.

*Laurence H. Tribe (University Professor; Harvard Law School)*

*Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*

What difference does our Constitution make? Does it matter whether we think about it only as a text, as living practice, or as a set of mostly unwritten principles? This course will explore such questions by investigating several concrete constitutional controversies—about abortion, birth, and dying; about embryo research; about race and gender; about the Obama health insurance reform; about sexual intimacy and same-sex marriage; about religion, free speech, and campaign finance; about workers’ rights; about informational privacy; and about emergency presidential action. Readings will be drawn from judicial and other writings about the Constitution, its history, and its interpretation.

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**[United States in the World 19. American Food: A Global History]**

Catalog Number: 43817

*Joyce E. Chaplin (History)*

*Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

Europeans “discovered” America in search of foodstuffs, specifically spices. And food has been central to the American experience from the starving time in early Virginia to the problem of obesity in the United States today. But what is American about American food? How have individual food choices and national food policies connected Americans to the larger world, both the social worlds of other human beings and the natural world of all other living beings?

*Note:* Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**United States in the World 20 (formerly Moral Reasoning 74). The Theory and Practice of Republican Government**

Catalog Number: 1489

*Daniel P. Carpenter (Government)*

*Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3*

A theoretical and historical survey of the evolution of republican (representative) government, with a particular focus upon European and American institutions. We will alternate between philosophical treatments and empirical studies of republican regimes. Questions include: How did republican government evolve (in England and France) centuries before mass elections? What institutions besides elections keep the ruled attuned to the people? Did arguments for legislative supremacy prefigure the rise of parliamentary authority? If so, how? How did modern republics co-evolve with institutions of slavery? What is the role of virtue in a democratic
republic? How can government ensure the “rule of the wise” without fostering autocratic power? What critique might republican theory advance of populist and libertarian arrangements, and how populist and libertarian critics respond?

**Note:** This course, when taken for a letter grade, meets the General Education requirement for United States in the World or Ethical Reasoning, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**[United States in the World 23 (formerly English 177). Art and Thought in the Cold War]**

*Catalog Number: 7704*

*Louis Menand (English)*

*Half course (spring term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5*

Culture of the early Cold War (1945-1965) in the context of political events and intellectual developments. We will be particularly interested in the unintended consequences of Cold War policies and in trans-Atlantic cultural exchange. Subjects include the literature of totalitarianism, Abstract Expressionism, the Beats, the philosophy of higher education, the Warren Court, film noir, and the French New Wave.

**Note:** No auditors permitted without permission of the instructor. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[United States in the World 24 (formerly Sociology 19). Reinventing Boston: The Changing American City]**

*Catalog Number: 9395*

*Robert J. Sampson (Sociology) and David Luberoff (Harvard Kennedy School)*

*Half course (fall term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16*

American cities have changed in extraordinary ways. In the last half of the 20th century, there was gloom about urban life and many cities were projected to decline and decay. Many did but Boston and other cities blossomed, becoming models of urban renaissance. Using Boston as a case, this course considers issues of economic change, technology, neighborhood inequality, political governance, elite relations, cultural institutions, crime, race and ethnic relations, immigration, gentrification and suburbanization. Regular guest speakers. Requirements: 5 short memos on neighborhood visits; 1 term paper; midterm essay and take-home final exam.

**Note:** Expected to be given in 2013–14. May be counted for introductory concentration requirement, if letter-graded. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**United States in the World 26 (formerly Studies of Women, Gender, and Sexuality 1000sc). Sex and the Citizen: Race, Gender, and Belonging in the United States**

*Catalog Number: 64666*

*Caroline Light (Studies of Women, Gender, and Sexuality)*

*Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3*

Even before the formal establishment of the United States, assumptions about sex have helped
determine who is entitled to - and not entitled to - the privileges and protections of full citizenship. This course investigates the roles that sex, gender, and sexuality have played in configuring notions of citizenship over time as well as the ways in which sexual rights remain a site of contestation and struggle in the modern United States.

Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

Catalog Number: 5470
Walter Johnson (History; African and African American Studies)
Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
This course treats the history of the 19th-century US and the Civil War in light of the history of US imperialism, especially the War of 1812, the Mexican-American War, and the illegal invasions of Cuba and Nicaragua in the 1850s. Likewise, it relates the history of slavery in the US to the Haitian Revolution, the Louisiana Purchase, Indian removal, Atlantic cotton, land and money markets, and the hemispheric history of antislavery.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

United States in the World 29 (formerly Literature and Arts B-20). Designing the American City: Civic Aspirations and Urban Form
Catalog Number: 3243
Alex Krieger (Harvard Graduate School of Design)
Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15
An interpretive look at the American city in terms of changing attitudes toward urban life. City and suburb are experienced as the product of design and planning decisions informed by cultural and economic forces, and in relationship to utopian and pragmatic efforts to reinterpret urban traditions in search of contemporary alternatives. Topics include: persistent ideals such as the single-family home, attitudes toward public and private space, the rise of suburbs and suburban sprawl, cycles of disinvestment and renewed interest in urban centers, and impacts of mobility and technology on settlement patterns.

Note: Offered jointly with the Graduate School of Design as DES 0330200. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

Catalog Number: 21669
Laurel Thatcher Ulrich (University Professor; History) and Sarah Anne Carter (History and Literature)
Half course (spring term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
People make history through the things they make, collect, exhibit, exchange, throw away, or ignore. Over four centuries, Harvard has not only amassed books and manuscripts but art works, scientific instruments and specimens, ethnographic objects, and historical relics of all sorts. By learning how and why particular things arrived in Cambridge and what happened to them when they got here, students will discover how material objects have shaped academic disciplines, reinforced or challenged social boundaries, and defined America’s place in the world. This is an interactive course, with weekly visits to museums and close-up investigation of specimens and artifacts.

Note: Expected to be given in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**United States in the World 31 (formerly Social Analysis 54). American Society and Public Policy**

Catalog Number: 6661

*Theda Skocpol (Government) and Mary C. Waters (Sociology)*

Halff course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4

In the US compared to other major nations, how have social problems been defined and redefined in recent decades; why do they appear differently to various groups; and how are public policies about problematic social conditions debated, devised, and changed? This course synthesizes various kinds of evidence—demographic, attitudinal, ethnographic, and institutional—to probe the creation and impact of major public policies about social support for families and workers; immigration and citizenship, and access to higher education.

Note: This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

*United States in the World 32 (formerly Religion 1007). The World’s Religions in Multicultural America: Case Studies in Religious Pluralism*

Catalog Number: 8833 Enrollment: Limited to 56.

*Diana L. Eck (South Asian Studies; Study of Religion)*

Halff course (fall term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP: 13, 14

An exploration of the dynamic religious landscape of the US with special focus on Muslim, Hindu, Buddhist, and Sikh traditions in the most recent period of post-1965 immigration. How are faith and freedom negotiated in a more complex society? In what contexts do minority religious communities encounter long-dominant Christian and Jewish communities? How is America changing as religious communities struggle with civic, constitutional, ethical, and theological issues, especially in the post-9/11 period? Readings, films, discussion, and class projects will focus on particular cases and controversies.

Note: Offered jointly with the Divinity School as 3847. This course, when taken for a letter grade, meets the General Education requirement for United States in the World or Culture and Belief, but not both. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

2012-2013 Previous Courses of Instruction

Catalog Number: 8058
Marla F. Frederick (African and African American Studies; Study of Religion)
Half course (fall term). M., W., at 1, and a weekly section to be arranged. EXAM GROUP: 6
Religion has inspired new understandings of social and political engagement. From early protest oriented struggles for civil rights in the US to the more recent personal responsibility calls of neo-pentecostal discourses, this course takes African American religious engagement with the process of democracy as a starting point for thinking about how other communities around the world have employed religion as a means of advancing social change. Through ethnography, auto/biography, and documentary film, this class compares and contrasts the influence that religious moods and motivations have had on calls for democracy and social change in places like Latin America, the Middle East and West Africa. In each instance the course questions the place of the US government and US religious bodies in these global efforts towards change.

Note: Offered jointly with the Divinity School as 3700. This course, when taken for a letter grade, meets the General Education requirement for United States in the World or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

United States in the World 34. The Civil War from Nat Turner to Birth of a Nation
Catalog Number: 43416
Amanda Claybaugh (English) and John Stauffer (English; African and African American Studies)
Half course (spring term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
This interdisciplinary course reframes traditional understandings of the Civil War in three ways. First, by showing that civil conflict in the United States began well before 1861 and ended well after 1865, taking the form of slave uprisings and Klan terrorism, as well as conventional war. Second, by showing that the former Confederacy won this longer Civil War by establishing a new order of black freedom. And third, by placing this war in the context of international politics and trade. "Readings" range from fiction, film, letters, and speeches to poetry, pamphlets, prints and photographs, songs, and history.

Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

United States in the World 35. Dilemmas of Equity and Excellence in American K-12 Education
Catalog Number: 55027 Enrollment: Limited to 80.
Katherine K. Merseth (Harvard Graduate School of Education)
Half course (fall term). M., W., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 6, 7
Events such as Teach for America’s 20th anniversary and films like Waiting for Superman highlight urgent concerns about the quality and reach of American schooling in the 21st century. Against this backdrop, the course grapples with several dilemmas that have defined American K-12 education throughout history. What constitutes educational excellence? Can excellence be achieved for everyone? Why do we have schools and what is their purpose? Given that families, politicians, and the courts often disagree vehemently about the answers to these questions, the
course considers who and what will define the future of American education and its role in society.  

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**United States in the World 36. Innovation and Entrepreneurship: American Experience in Comparative Perspective**

Catalog Number: 27723  
Enrollment: Limited to 95.  
*Mihir Desai* (Harvard Business School)  
*Half course (spring term). Tu., Th., 4–5:30. EXAM GROUP: 18*

What gives rise to entrepreneurial opportunity and innovative activity? How do innovators and entrepreneurs think about the world? How are organizations born and how do they grow? How can innovation and entrepreneurship address the major challenges facing the world? The course will address these questions by bringing together faculty members of Harvard University to provide a diverse set of perspectives on the nature of innovation and entrepreneurship. The course has three complementary pedagogical methods. Members of the Harvard Business School faculty will provide a set of interactive lectures using case studies that illustrate how for-profit and not-for-profit organizations recognize and capitalize on opportunities. Second, faculty members from around the University will provide lectures on specific areas related to their expertise. Third, a set of group projects that allow students to work in the field with sponsoring organizations will be completed over the course of the semester.  

*Note:* Expected to be given in 2013–14. Unlike other General Education courses, this course assumes advanced coursework in a relevant social science and thus is open to freshmen only with permission of the instructor. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**United States in the World 38. Forced to be Free: Americans as Occupiers and Nation-Builders – (New Course)**

Catalog Number: 26219  
*Andrew Gordon* (History) and *Erez Manela* (History)  
*Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

The United States has launched numerous projects of military occupation and nation-building in foreign lands since the late 19th century. These have been contradictory enterprises, carrying ideals of freedom and self-determination "offered" by force or by fiat. This course will assess the meanings and legacies of these projects by examining the ideas, strategies, policies, and outcomes of occupations ranging from the Philippines and Haiti early on, to Japan, Germany, and Korea in mid-century to, most recently, Afghanistan and Iraq. The course focuses on American activities and ideas but also examines the responses of the occupied.  

*Note:* Expected to be omitted in 2013–14. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Cross-listed courses that satisfy the United States in the World Requirement. Some of these courses may have prerequisites or assume familiarity with the subject matter.
Graduate Seminars in General Education

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

These seminars for graduate students are committed to the discussion, development, and design of undergraduate courses that will be appropriate for the new Program in General Education. Graduate students actively engage with faculty to consider central conceptual and analytic themes, course design and pedagogy, as well as other important decisions in the development and implementation of courses in general education.

Interested graduate students should contact the specific faculty members for more information and check with their home departments about whether these courses will fulfill requirements for relevant graduate degrees.

Graduate Seminars in General Education

Comparative Literature 295. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education) - (New Course)
Catalog Number: 15604
John T. Hamilton and Alexander Rehding
Half course (spring term). F., 1–3. EXAM GROUP: 6, 7
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on “The Art of Listening,” by addressing questions such as the distinction between hearing and listening and, ultimately, between sense and sensibility.
Note: The seminar will design and develop a General Education course on these themes for undergraduates.

*East Asian Film and Media Studies 203 (formerly Japanese History 257). Animated Spirituality: Japanese Religion in Anime, Manga, and Film (Graduate Seminar in General Education) - (New Course)
Catalog Number: 80319 Enrollment: Limited to 20.
Helen Hardacre
Half course (fall term). W., 4–6. EXAM GROUP: 9
This course will address the representation of religion in Japanese popular culture, with emphasis on anime, manga, and film, examining depictions of religious figures, themes, and human dilemmas in contemporary popular culture as a gateway to understanding the significance of religion in Japanese society and history.
Note: The seminar will design and develop a General Education course on these themes for undergraduates. This course must be taken Sat/Unsat.

*English 295a. Frameworks in the Humanities: The Art of Reading (Graduate Seminar in General Education) - (New Course)
Catalog Number: 62839
Homi K. Bhabha
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on "The Art of Reading," by addressing questions such as the distinction between seeing and looking, hearing and listening and, ultimately, between sense and sensibility.
Note: The seminar will design and develop a General Education course on these themes for undergraduates.

History of Art and Architecture 276k. Frameworks in the Humanities: The Art of Looking (Graduate Seminar in General Education) - (New Course)
Catalog Number: 15858
Robin E. Kelsey and Jennifer L. Roberts
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on "The Art of Looking," by addressing questions such as the distinction between seeing and looking and, ultimately, between sense and sensibility.
Note: The seminar will design and develop a General Education course on these themes for undergraduates.

History of Science 221. Einstein Reversed (Graduate Seminar in General Education) - (New Course)
Catalog Number: 21014
Peter L. Galison
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
This course explores the history of physics and confronts issues of digital film and internet development, curriculum design, and IP issues. Students will produce films and develop a
combination of scientific, social scientific, and humanistic assignments. 

*Note:* The seminar will design and develop a General Education course on these themes for undergraduates.

**[History of Science 245. The Changing Concept of Race in Science and Medicine in the United States: From Jefferson to Genomics (Graduate Seminar in General Education)]** - *(New Course)*

Catalog Number: 57429  
Evelynn M. Hammonds  
Half course (fall term). Th., 4–6. EXAM GROUP: 18  
This course explores the history of the concept of "race" as used by biologists, anthropologists, and physicians from the 17th century to the present and social and political responses to the concept of race in these fields.  
*Note:* Expected to be given in 2013–14. The seminar will design and develop a General Education course on these themes for undergraduates.

**[Music 295r. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education)]** - *(New Course)*

Catalog Number: 77487  
Alexander Rehding and John T. Hamilton  
Half course (spring term). F., 1–3. EXAM GROUP: 6, 7  
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on “The Art of Listening,” by addressing questions such as the distinction between hearing and listening and, ultimately, between sense and sensibility.  
*Note:* The seminar will design and develop a General Education course on these themes for undergraduates.

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**Core Curriculum**

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

As of July 2008, the General Education Committee assumed responsibility for the Core Curriculum. For further information, please consult the Core website, my.harvard.edu/core. Students entering prior to Fall 2009 are required to complete the Core requirements unless they choose to switch to the Program in General Education. For more information, please consult the General Education website, www.generaleducation.fas.harvard.edu.

**Foreign Cultures**
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The goals common to all courses in Foreign Cultures are to expand one’s understanding of the importance of cultural factors in shaping people’s lives, and to provide fresh perspectives on one’s own cultural assumptions and traditions, through study of cultures significantly different from that of the US and the anglophone cultures of the British Isles, Canada, Australia, and New Zealand. These courses also introduce methods of studying a culture, and the issues involved in approaching a culture not one’s own. Whether the primary emphasis is on the analysis of key texts and works of art, on historical change, or on other fundamental aspects of individual or social life, Foreign Cultures courses seek to identify the distinctive patterns of thought and action that account for the particular configuration or ethos of another culture.

With the exception of the specific courses listed at the end of this section, departmental courses, including language courses, may not be substituted for Foreign Cultures courses to meet this requirement. Consult the Introduction to the Core Curriculum for further details.

Foreign Cultures

General Education courses that satisfy the Foreign Cultures requirement

[Aesthetic and Interpretive Understanding 35. Forms in Korean Cultural History]
Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture
[Aesthetic and Interpretive Understanding 39 (formerly Chinese Literature 150). Old Tales for New Times: The Appropriation of Folklore in Modern and Contemporary China]
[Aesthetic and Interpretive Understanding 45 (formerly Foreign Cultures 72). Art and Politics in Russia and Eastern Europe]
[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes–Culture, History, and Beliefs in Andean South America
Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
[Culture and Belief 26 (formerly Foreign Cultures 81). The Culture of Everyday Life in China]
[Culture and Belief 28. Hindu Worlds of Art and Culture]
Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]
Culture and Belief 42 (formerly Foreign Cultures 92). Communism and the Politics of Culture: Czechoslovakia from the Prague Spring to the Velvet Revolution
Culture and Belief 43. The World of Yiddish
Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion
[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]
Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World
[Societies of the World 21 (formerly Foreign Cultures 63). China’s Two Social Revolutions]
Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!
Societies of the World 33 (formerly Foreign Cultures 84). Tokyo
Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation
Societies of the World 36 (formerly Historical Study A-16). Modern India and South Asia
Societies of the World 46 (formerly Anthropology 1621). The Anthropology of Arabia

Departmental courses that satisfy the Foreign Cultures requirement

The following departmental courses may be taken to meet the Foreign Cultures requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

African and African American Studies 11. Introduction to African Studies
African and African American Studies 20. Introduction to African Languages and Cultures
[Anthropology 1125. The Moche of Ancient Peru: Politics, Economy, Religion and Art]
Anthropology 1795. The Politics of Language and Identity in Latin America
Armenian Studies 102. Introduction to Armenian Civilization
[Chinese 187. Art and Violence in the Cultural Revolution]
Chinese Literature 114 (formerly Foreign Cultures 68). Authority and the Claims of the Individual in Chinese Literary Culture
[*History 86e. Nation, Reason and Religion in South Asia]
History 1620. Modern Vietnam
[History of Art and Architecture 197. The Imperial Arts of the Inca and the Aztec]
[Japanese Literature 162. Girl Culture, Media, and Japan]
Latin American Studies 70. Modernity, Culture and Politics in Latin America
The Modern Middle East 111 (formerly Islamic Civilizations 105). Culture and Society in Contemporary Iran
[Visual and Environmental Studies 192 (formerly Foreign Cultures 21). Cinema and French Culture from 1896 to the Present]

Historical Study

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The common aim of courses in Historical Study is to develop students’ comprehension of history as a form of inquiry and understanding. The courses fall into two groups representing two emphases in historical study.
Historical Study A

Courses in Historical Study A are designed to help the student understand, through historical study, the background and development of major issues of the contemporary world. These courses illustrate the way in which historical study helps make sense of some of the great issues—often problematic policy issues—of our own world. The courses focus on the sequential development of issues whose origins may be quite distant from the present but whose significance is still profound in the world in which students live today.

Historical Study A

General Education courses that satisfy the Historical Study A requirement

[Culture and Belief 11. Medicine and the Body in East Asia and in Europe]
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
[Culture and Belief 31 (formerly Philosophy 19). Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion]
[Culture and Belief 34 (formerly Historical Study A-87). Madness and Medicine: Themes in the History of Psychiatry]
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]
Culture and Belief 52 (formerly History 1213). The American Evangelical Tradition from Jonathan Edwards to Jerry Falwell
[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]
Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World
Societies of the World 14 (formerly Historical Study A-88). The British Empire
Societies of the World 18 (formerly History 1205). Europe Since the Second World War
[Societies of the World 19. Western Ascendancy: The Mainsprings of Global Power from 1600 to the Present]
[Societies of the World 22. Asia in the Making of the Modern World]
[Societies of the World 27 (formerly Historical Study A-75). The Two Koreas]
[Societies of the World 28. Exploration and Empire Building]
[Societies of the World 35. Conditional Equality: The Case of the Jews of Europe in Modern Times]
Societies of the World 36 (formerly Historical Study A-16). Modern India and South Asia
[Societies of the World 37 (formerly Historical Study A-89). The Chinese Overseas]
Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt
[Societies of the World 45 (formerly Chinese History 118). Beyond the Great Wall: China and its Nomadic Other]
[United States in the World 13 (formerly Historical Study A-34). Medicine and Society in America]
United States in the World 26 (formerly Studies of Women, Gender, and Sexuality 1000sc), Sex and the Citizen: Race, Gender, and Belonging in the United States
United States in the World 38. Forced to be Free: Americans as Occupiers and Nation-Builders - (New Course)

Departmental courses that satisfy the Historical Study A requirement

The following departmental courses may be taken to meet the Historical Study A requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

African and African American Studies 10. Introduction to African American Studies
[Economics 1776. Religion and the Rise of Capitalism]
Government 40. International Conflict and Cooperation
Government 1171 (formerly Societies of the World 32). The Making of Modern Politics: The Development of Democracy in Europe from the Middle Ages to the European Union
[Government 1730. War and Politics]
Government 1732. The Origins of Modern Wars
[History 1224. Britain since 1760: Island, Europe, Empire]
History 1270. Frontiers of Europe: Ukraine since 1500
History 1290. The History of the Russian Empire
[History 1330. Social Thought in Modern America]
[History 1345. The Human Sciences in the Modern West]
History 1445. Science and Religion in American Public Culture
[History 1465. The United States in the World since 1900]
History 1511. Latin America and the United States - (New Course)
History 1513. History of Modern Latin America - (New Course)
[History 1623. 20th-Century Japan]
History 1701. West Africa from 1800 to the Present
History 1920. A Global History of Modern Times
History of Science 100. Knowing the World: An Introduction to the History of Science
History of Science 180. Science, Technology, and Society in Modern East Asia
Sociology 107 (formerly United States in the World 21). The American Family
The Modern Middle East 170 (formerly Arabic 170), Introduction to the Arab World II: Politics, Religion, and Culture from World War I to Present

Historical Study B

Courses in Historical Study B focus closely on the documented details of some central historical
event or transformation in the deeper past. They aim to develop an understanding of the complexity of human affairs, of the way in which a variety of forces—economic, cultural, religious, political—have interacted with individual aspirations and with the deliberate efforts of individuals to control and shape events in specific contexts and historical moments. They are sufficiently delimited in time to allow concentrated study of primary source materials.

**Historical Study B**

**General Education courses that satisfy the Historical Study B requirement**

- Culture and Belief 17 (formerly Historical Studies B-06). Institutional Violence and Public Spectacle: The Case of the Roman Games
- Culture and Belief 47 (formerly Historical Study B-45). The Darwinian Revolution
- Culture and Belief 51. Making the Middle Ages - (New Course)
- History 1704 (formerly Societies of the World 39). Slavery and Slave Trade in Africa and the Americas
- Societies of the World 41 (formerly History 1050). Medieval Europe
- Societies of the World 42. The World Wars in Global Context, 1905-1950
- Societies of the World 43 (formerly Historical Study B-67). Japan’s Samurai Revolution
- United States in the World 34. The Civil War from Nat Turner to Birth of a Nation

**Departmental courses that satisfy the Historical Study B requirement**

The following departmental courses may be taken to meet the Historical Study B requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

- Ancient Near East 104. Babylon
- Classical Studies 97b (formerly *Classics 97b). Roman Culture and Civilization
- Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe - (New Course)
- Classical Studies 165. Medicine in the Greco-Roman World
- History 1040. The Fall of the Roman Empire
- History 1041 (formerly Historical Study B-13). Charlemagne and the Birth of Medieval Civilization
- History 1060. Europe and Its Borders, 950-1550
- History 1144 (formerly Historical Study B-19). The Renaissance in Florence
- History 1167 (formerly Historical Study B-18). The Protestant Reformation
- History 1253 (formerly Historical Study B-35). The French Revolution: Causes, Processes, and Consequences
Literature and Arts

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Courses in Literature and Arts aim to foster a critical understanding of artistic expression, and to exemplify the ways in which the humanities are an arena for scholarly examination and discussion. These courses illustrate and analyze what constitutes knowledge in the various fields—its varieties, forms, scope, uses and abuses, and modes of interpretation—while familiarizing students with major works, major themes, or clusters of creative achievement in particular times and places.

Literature and Arts A

Focuses on literary texts and methods of literary analysis. Courses in this area offer a variety of critical and analytical approaches to literature, and a range of responses to questions such as the following: How does literature function? How are literary genres and traditions constituted and transformed? What are the relations among author, reader, text, and the circumstances in which the text is produced? How is our reading of the literature of the past influenced by the concerns of the present?

Literature and Arts A

General Education courses that satisfy the Literature and Arts A requirement

Aesthetic and Interpretive Understanding 11. Poetry Without Borders
[Aesthetic and Interpretive Understanding 12. Poetry in America]
[Aesthetic and Interpretive Understanding 15 (formerly English 34). Elements of Rhetoric]
Aesthetic and Interpretive Understanding 20 (formerly Literature and Arts A-22). Poems, Poets, Poetry
Aesthetic and Interpretive Understanding 21 (formerly Literature and Arts A-51). Virgil:
Poetry and Reception
[Aesthetic and Interpretive Understanding 29 (formerly Literature and Arts A-48). Modern Jewish Literature]
[Aesthetic and Interpretive Understanding 30 (formerly Literature and Arts A-92). Love In A Dead Language: Classical Indian Literature and Its Theorists]
Aesthetic and Interpretive Understanding 34. Interpretation: Artful Reading of Page, Stage, and Screen
[Aesthetic and Interpretive Understanding 37. Introduction to the Bible in the Humanities and the Arts]
[Aesthetic and Interpretive Understanding 38. The English Language as Literature]
[Aesthetic and Interpretive Understanding 47 (formerly Literature and Arts A-90). Forbidden Romance in Modern China]
[Aesthetic and Interpretive Understanding 49 (formerly Medieval Studies 114). The Medieval Imagination: Visions, Dreams, and Prophecies]
Aesthetic and Interpretive Understanding 50 (formerly Literature 128). Literature and Medicine
[Culture and Belief 32. Back Roads to Far Places: Literature of Journey and Quest]
Culture and Belief 37 (formerly Studies of Women, Gender, and Sexuality 1122). The Romance: From Jane Austen to Chick Lit
[Culture and Belief 39 (formerly Literature and Arts A-93). The Hebrew Bible]
Culture and Belief 45 (formerly English 101). The History of the English Language
[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]
[Culture and Belief 49 (formerly Literature and Arts A-86). American Protest Literature from Tom Paine to Tupac]

Departmental courses that satisfy the Literature and Arts A requirement

The following courses may be taken to meet the Literature and Arts A requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

[Aesthetic and Interpretive Understanding 51 (formerly Italian 131). The Cosmos of the Comedy]
African and African American Studies 131. African American Literature from the Beginnings to the Harlem Renaissance
[Celtic 137. Celtic Mythology]
Chinese Literature 114 (formerly Foreign Cultures 68). Authority and the Claims of the Individual in Chinese Literary Culture
English 157. The Classic Phase of the Novel
English 182. Science Fiction
English 192. Political Theatre and the Structure of Drama
*Folklore and Mythology 90I (formerly Aesthetic and Interpretive Understanding 27). Fairy Tales and Fantasy Literature
French 70a. Introduction to French Literature I: From the Middle Ages to Modernity
French 70b. Introduction to French Literature II. 19th and 20th Centuries: Moving and Shaking
French 70c. Introduction to French Literature III: The Francophone World
German 71. German Literature from Goethe to Nietzsche
German 72. German Literature from Kafka to Jelinek
Literature 101 (formerly Literature 11). Writing Across Cultures: Literatures of the World (from 1750 to the present)
[Literature 103 (formerly Literature 10). Writing Across Cultures: Literatures of the World (to 1750)]
[*Literature 106. On Lyric]
[*Literature 121. 1001 Nights: Adaptations, Transformations and Translations]
[Literature 166 (formerly Comparative Literature 166). The Comic Tradition in Jewish Culture]
[Scandinavian 150. The Vikings and the Nordic Heroic Tradition]
[Slavic 152. Pushkin]
Spanish 70a. Heroes, Rogues, and Significant Others: Voices from Medieval and Early Modern Spain
Spanish 124. Don Quixote and the Art of Reading

Literature and Arts B

Introduces students to a non-literary form of expression, and offers instruction in the elements of either visual or musical understanding, in the discipline of looking or listening. In addition to studying the articulation of visual or musical forms and their meanings, courses may emphasize the relationship between artistic or musical production and the historical/cultural moment in which it takes place.

Literature and Arts B

General Education courses that satisfy the Literature and Arts B requirement

Aesthetic and Interpretive Understanding 16. Openings: The Illuminated Manuscript
Aesthetic and Interpretive Understanding 24 (formerly Literature and Arts B-51). First Nights: Five Performance Premieres
[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]
[Aesthetic and Interpretive Understanding 31 (formerly Literature and Arts B-85). American Musicals and American Culture]
[Aesthetic and Interpretive Understanding 40. Monuments of Islamic Architecture]
[Aesthetic and Interpretive Understanding 44. Arts of Asia]
[Aesthetic and Interpretive Understanding 46 (formerly Literature and Arts B-49). Modernisms 1865–1968]
Aesthetic and Interpretive Understanding 53 (formerly Japanese Literature 161). Anime as Global Popular Culture
Aesthetic and Interpretive Understanding 58. Modern Art and Modernity - (New Course)
Culture and Belief 30. Seeing is Believing: A History of Photography
[Culture and Belief 46. Music, Debate, and Islam]
Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion
United States in the World 29 (formerly Literature and Arts B-20). Designing the American City: Civic Aspirations and Urban Form

Departmental courses that satisfy the Literature and Arts B requirement

The following departmental courses may be taken to meet the Literature and Arts B requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

African and African American Studies 117x. Of Mean Streets and Jungle Fevers: Race, Gender and Ethnicity in Martin Scorsese and Spike Lee
[African and African American Studies 179 (formerly Literature and Arts B-82). Jazz, Freedom, and Culture]
[Anthropology 1125. The Moche of Ancient Peru: Politics, Economy, Religion and Art]
[Anthropology 1720. Anthropology, Cultural Studies, and Film]
[Anthropology 1875. Moving Pictures: An Anthropology of Images ]
*Folklore and Mythology 114. Embodied Expression/Expressive Body: Dance in Cultural Context

History of Art and Architecture 1. Landmarks of World Art & Architecture
[History of Art and Architecture 10. The Western Tradition: Art since the Renaissance]
History of Art and Architecture 11. Landmarks of World Architecture
[History of Art and Architecture 70. Introduction to Modern Art and Visual Culture, 1700–1990s]
[History of Art and Architecture 120n. Art of the Timurids in Greater Iran and Central Asia]

History of Art and Architecture 172w. American Art and Modernity, 1865–1965
[History of Art and Architecture 197. The Imperial Arts of the Inca and the Aztec]

Medieval Studies 107. Authority and Invention: Medieval Art and Architecture
Music 1a. Introduction to Western Music from the Middle Ages to Mozart
Music 1b. Introduction to Western Music from Beethoven to the Present
Music 2. Foundations of Tonal Music I
Music 153. Jazz Harmony
[Music 190gw (formerly Music 190rs). South Indian Music]

Visual and Environmental Studies 70. The Art of Film
Visual and Environmental Studies 71. Silent Cinema
[Visual and Environmental Studies 72. Sound Cinema]
Visual and Environmental Studies 184. Imagining the City: Literature, Film, and the Arts
Literature and Arts C

Studies creative cultural epochs in history, and explores how works of literature and art function within a given society. Focusing on significant periods, styles, or movements, these courses describe and analyze ways in which culture is produced, interpreted, and disseminated.

**Literature and Arts C**

**General Education courses that satisfy the Literature and Arts C requirement**

[Aesthetic and Interpretive Understanding 13. Cultural Agents (formerly Literature and Arts C-56). Putting Modernism Together]

[Aesthetic and Interpretive Understanding 25 (formerly Literature and Arts C-55). Surrealism: Avant-Garde Art and Politics between the Wars]

[Aesthetic and Interpretive Understanding 41 (formerly Literature and Arts C-30). How and What Russia Learned to Read: The Rise of Russian Literary Culture]

[Aesthetic and Interpretive Understanding 42. Literature and Revolution: Great Books in Moments of Cultural Transformation]

[Aesthetic and Interpretive Understanding 45 (formerly Foreign Cultures 72). Art and Politics in Russia and Eastern Europe]

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]

[Culture and Belief 13. The Contested Bible: The Sacred-Secular Dance]

[Culture and Belief 16 (formerly Folklore and Mythology 100). Performance, Tradition and Cultural Studies: An Introduction to Folklore and Mythology]

[Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization]

[Culture and Belief 23 (formerly Literature and Arts C-70). From the Hebrew Bible to Judaism, From the Old Testament to Christianity]

[Culture and Belief 27 (formerly Jewish Studies 55). Among the Nations: Jewish History in Pagan, Christian and Muslim Context]

[Culture and Belief 28. Hindu Worlds of Art and Culture]

[Culture and Belief 33. Introduction to the Study of East Asian Religions]

[Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the Culture of Medieval Rus’]

[Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China]

[Culture and Belief 43. The World of Yiddish]

[Culture and Belief 50. The European Postwar: Literature, Film, Politics]

[Culture and Belief 53. Sacred and Secular Poetry - (New Course)]

[Culture and Belief 55. Enlightenment Creations of the Self, Society, and Institutions - (New Course)]

[Culture and Belief 56 (formerly English 193a). The Culture of Capitalism - (New Course)]

[United States in the World 23 (formerly English 177). Art and Thought in the Cold War]

*United States in the World 32 (formerly Religion 1007). The World’s Religions in Multicultural America: Case Studies in Religious Pluralism*
Departmental courses that satisfy the Literature and Arts C requirement

The following departmental courses may be taken to meet the Literature and Arts C requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

[Celtic 101. The Hero of Irish Myth and Saga]  
[Chinese 187. Art and Violence in the Cultural Revolution]  
Culture and Belief 35. Classical Mythology  
History 1144 (formerly Historical Study B-19). The Renaissance in Florence  
[Japanese Literature 162. Girl Culture, Media, and Japan]  
[*Literature 146 (formerly *Literature 124). Space and Place in Postmodern Culture]  
[Literature 157 (formerly Comparative Literature 111). From Type to Self in the Middle Ages]  
[Literature 165. The Holocaust and Problems of Representation]  
Religion 40. Incarnation and Desire: An Introduction to Christianity  
Religion 50. Religion, Law and American Politics - (New Course)  
Religion 1315. Prophecy, Ecstasy, and Dreams in Early Christian World  
[Slavic 148. Strange Russian Writers]  
[Spanish 70c. Documenting Spanish Modernity: A Survey of Spanish Literature and Culture from 1700]  
Spanish 71b. Introduction to Modern Latin American Literature  
[Spanish 110. Hispanic Literature: The Middle Ages]  
*Studies of Women, Gender, and Sexuality 1424. American Fetish: Consumer Culture Encounters the Other - (New Course)

Moral Reasoning

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The common aim of courses in Moral Reasoning is to discuss significant and recurrent questions of choice and value that arise in human experience. They seek to acquaint students with the important traditions of thought that have informed such choices in the past and to enlarge the students’ awareness of how people have understood the nature of the virtuous life. The courses are intended to show that it is possible to reflect reasonably about such matters as justice, obligation, citizenship, loyalty, courage, and personal responsibility.

Moral Reasoning

General Education courses that satisfy the Moral Reasoning requirement

[Culture and Belief 14. Human Being and the Sacred in the History of the West]  
Ethical Reasoning 11. Human Rights: A Philosophical Introduction  
Ethical Reasoning 12. Political Justice and Political Trials]  
[Ethical Reasoning 14 (formerly Moral Reasoning 33). Issues in Ethics]  
Ethical Reasoning 15 (formerly Moral Reasoning 54). “If There is No God, All is
Permitted:” Theism and Moral Reasoning
Ethical Reasoning 18 (formerly Moral Reasoning 78). Classical Chinese Ethical and Political Theory
Ethical Reasoning 20 (formerly Humanities 11). Self, Serenity, and Vulnerability: West and East
Ethical Reasoning 22 (formerly Moral Reasoning 22). Justice
[Ethical Reasoning 24. Bioethics]
[Ethical Reasoning 26. The Ethics of Atheism: Marx, Nietzsche, Freud]
[Ethical Reasoning 27 (formerly Moral Reasoning 28). Ethics and International Relations]
[Ethical Reasoning 28. Moral Inquiry in the Novels of Tolstoy and Dostoevsky]
[Ethical Reasoning 29. Social Theory, the Humanities, and Philosophy Now]
Ethical Reasoning 30. The Just World
Ethical Reasoning 31. The Philosopher and the Tyrant
Ethical Reasoning 32. Security: Carefree or Careless - (New Course)
Ethical Reasoning 33. Medical Ethics and History - (New Course)
Ethical Reasoning 34. Liberty - (New Course)
Ethical Reasoning 35. Nature - (New Course)
United States in the World 20 (formerly Moral Reasoning 74). The Theory and Practice of Republican Government

Departmental courses that satisfy the Moral Reasoning requirement

The following departmental courses may be taken to meet the Moral Reasoning requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

Government 10. Foundations of Political Theory
Government 1060. Ancient and Medieval Political Philosophy
Government 1061. The History of Modern Political Philosophy
[Government 1082. What is Property?]
[Government 1510. American Constitutional Law]
[Government 1511. The Constitution and the American Political System]
[History 1300. Western Intellectual History: Greco-Roman Antiquity]
[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]
Philosophy 168. Kant’s Ethical Theory
Philosophy 172. The History of Modern Moral Philosophy
[Philosophy 174. Recent Ethical Theory]
Philosophy 179. Race and Social Justice

Quantitative Reasoning

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION
The aim of courses in this area is to introduce students to mathematical and quantitative modes of thought. Some courses emphasize theoretical aspects of mathematics or statistical reasoning: a course on number theory or deductive logic, for example, would fall under this heading. Other courses in this area explore the application of quantitative methods to questions in the natural sciences, social sciences, or humanities: courses on making decisions under uncertainty, or on analyzing demographic trends are examples of such applications.

**Quantitative Reasoning**

*General Education courses that satisfy the Quantitative Reasoning requirement*

Empirical and Mathematical Reasoning 15 (formerly Quantitative Reasoning 50). Medical Detectives
Empirical and Mathematical Reasoning 17 (formerly Quantitative Reasoning 22). Deductive Logic
Empirical and Mathematical Reasoning 18. What are the odds?
[Empirical and Mathematical Reasoning 19 (formerly Quantitative Reasoning 46). The Art of Numbers]
Societies of the World 24. Global Health Challenges: Complexities of Evidence-Based Policy

*Departmental courses that satisfy the Quantitative Reasoning requirement*

The following departmental courses may be taken to meet the Quantitative Reasoning requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

Applied Mathematics 21a. Mathematical Methods in the Sciences
Applied Mathematics 21b. Mathematical Methods in the Sciences
Applied Mathematics 101. Statistical Inference for Scientists and Engineers
Computer Science 1. Great Ideas in Computer Science
Computer Science 20. Discrete Mathematics for Computer Science
Computer Science 50. Introduction to Computer Science I
Computer Science 171. Visualization
Economics 1123. Introduction to Econometrics
[Economics 1126. Quantitative Methods in Economics]
Government 50. Introduction to Political Science Research Methods
*Government 1000. Quantitative Methods for Political Science I
*History of Science 125. "Moneyball" Nation: Science and the Making of Modern America
- (New Course)
Mathematics 1a. Introduction to Calculus
Mathematics 1b. Calculus, Series, and Differential Equations
Mathematics 18 (formerly Mathematics 20). Topics from Single and Multivariable Calculus for Social Sciences
Mathematics 19a. Modeling and Differential Equations for the Life Sciences
Mathematics 19b. Linear Algebra, Probability, and Statistics for the Life Sciences
Mathematics 21a. Multivariable Calculus
Mathematics 21b. Linear Algebra and Differential Equations
Mathematics 23a. Linear Algebra and Real Analysis I
Mathematics 23b. Linear Algebra and Real Analysis II
Mathematics 25a. Honors Linear Algebra and Real Analysis I
Mathematics 25b. Honors Linear Algebra and Real Analysis II
*Mathematics 55a. Honors Abstract Algebra
*Mathematics 55b. Honors Real and Complex Analysis
Mathematics 101. Sets, Groups and Topology
Mathematics 154 (formerly Mathematics 191). Probability Theory
Psychology 1900. Introduction to Statistics for the Behavioral Sciences
*Sociology 156. Quantitative Methods in Sociology
Statistics 100. Introduction to Quantitative Methods for the Social Sciences and Humanities
Statistics 101. Introduction to Quantitative Methods for Psychology and the Behavioral Sciences
Statistics 104. Introduction to Quantitative Methods for Economics
Statistics 110. Introduction to Probability

The following departmental courses taken together may be used to meet the Quantitative Reasoning requirement.

Mathematics Ma (formerly Mathematics Xa). Introduction to Functions and Calculus I
Mathematics Mb (formerly Mathematics Xb). Introduction to Functions and Calculus II

Science

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The common aim of the courses in Science is to explore the phenomena, ways of observing and understanding them, theories that synthesize them, and the undergirding methodology that, taken together, result in the scientific perception of our world. This world encompasses the very small—elementary particles, nuclei, atoms, molecules, genes, and cells; the very large—the Earth, the solar system, and the universe; and living things, including human beings in the past and present. Each course addresses one or several of these topics in some depth. Students participate by solving problems, and by observing or by experimenting in the laboratory. This exposure helps to develop scientific literacy and numeracy, thereby leading to a better understanding of today’s technologically and scientifically oriented society.

Science A
Courses in this section, largely concerned with the physical sciences, deal with the analysis of natural phenomena through quantitative descriptions and synthesis of their simple elements.

Science B

Courses in this section, emphasizing biological, evolutionary, and environmental science, present semiquantitative and frequently descriptive accounts of complex systems that cannot yet be fully analyzed on the basis of their simple elements.

Science A

General Education courses that satisfy the Science A requirement

Science of the Physical Universe 12 (formerly Science A-43). Natural Disasters
[Science of the Physical Universe 17 (formerly Science A-41). The Einstein Revolution]
[Science of the Physical Universe 20. What is Life? From Quarks to Consciousness]
Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the Brontosaurus and Beyond
[*Science of the Physical Universe 24. Introduction to Technology and Society]
[Science of the Physical Universe 29. The Climate-Energy Challenge]
Science of the Physical Universe 30 (formerly Science A-54). Life as a Planetary Phenomenon

Departmental courses that satisfy the Science A requirement

The following departmental courses may be taken to meet the Science A requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

Astronomy 16. Stellar and Planetary Astronomy
Astronomy 17. Galactic and Extragalactic Astronomy
Chemistry 17. Principles of Organic Chemistry
Chemistry 20. Organic Chemistry
Chemistry 27. Organic Chemistry of Life
Chemistry 30. Organic Chemistry
Earth and Planetary Sciences 21 (formerly EPS 7). The Dynamic Earth: Geology and Tectonics Through Time
Earth and Planetary Sciences 109. Earth Resources and the Environment
Earth and Planetary Sciences 133. Atmospheric Chemistry
Engineering Sciences 1. Introduction to Engineering Sciences
Engineering Sciences 50. Introduction to Electrical Engineering
Life and Physical Sciences A. Foundational Chemistry and Biology
Life Sciences 1a. An Integrated Introduction to the Life Sciences: Chemistry, Molecular Biology, and Cell Biology
Philosophy 151z. Philosophy of Quantum Mechanics
Physical Sciences 1. Chemical Bonding, Energy, and Reactivity: An Introduction to the Physical Sciences
Physical Sciences 2. Mechanics, Elasticity, Fluids, and Diffusion
Physical Sciences 3. Electromagnetism, Circuits, Waves, Optics, and Imaging
Physical Sciences 10. Chemistry: A Microscopic Perspective on Molecules, Materials, and Life
Physical Sciences 11. Foundations and Frontiers of Modern Chemistry: A Molecular and Global Perspective
Physical Sciences 12a. Mechanics from an Analytic, Numerical and Experimental Perspective - (New Course)
Physics 11a. Mechanics
Physics 11b. Electricity, Magnetism, and Waves
Physics 15a. Introductory Mechanics and Relativity
Physics 15b. Introductory Electromagnetism
Physics 15c. Wave Phenomena
Physics 16. Mechanics and Special Relativity
Physics 123. Laboratory Electronics
Physics 125. Widely Applied Physics

Science B

Courses in this section, emphasizing biological, evolutionary, and environmental science, present semiquantitative and frequently descriptive accounts of complex systems that cannot yet be fully analyzed on the basis of their simple elements.

Science B

General Education courses that satisfy the Science B requirement

Science of Living Systems 11. Molecules of Life
Science of Living Systems 12. Understanding Darwinism
Science of Living Systems 17 (formerly Science B-23). The Human Organism
[Science of Living Systems 18 (formerly Science B-65). Evolutionary Biology: Sex, Survival, and the Orgy of Species]
Science of Living Systems 20. Psychological Science
[Science of Living Systems 21. Evolutionary Medicine]
Science of Living Systems 22. Human Influence on Life in the Sea
Science of the Physical Universe 14 (formerly Science B-35). How to Build a Habitable Planet
[Science of the Physical Universe 20. What is Life? From Quarks to Consciousness]
Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the Brontosaurus and Beyond

Departmental courses that satisfy the Science B requirement

The following departmental courses may be taken to meet the Science B requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

Engineering Sciences 6. Environmental Science and Technology
Human Evolutionary Biology 1310. Hormones and Behavior
Life and Physical Sciences A. Foundational Chemistry and Biology
Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution
Life Sciences 2. Evolutionary Human Physiology and Anatomy
MCB 52. Molecular Biology
MCB 54. Cell Biology
MCB 80. Neurobiology of Behavior
MCB 131. Computational Neuroscience
[*MCB 142. Major Advances in Classical and Molecular Genetics]
OEB 10. Foundations of Biological Diversity
OEB 52. Biology of Plants
OEB 53. Evolutionary Biology
OEB 54. Biology of the Fungi
OEB 55. Ecology: Populations, Communities, and Ecosystems
OEB 57. Animal Behavior
OEB 59. Plants and Human Affairs
OEB 145. Genes and Behavior
Psychology 13. Cognitive Psychology
Psychology 15. Social Psychology
Psychology 18. Abnormal Psychology
2012-2013 Previous Courses of Instruction

Psychology 1201. Your Brain on Drugs: Psychopharmacology
SCRB 10. Human Developmental and Regenerative Biology

Social Analysis

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The common aim of courses in Social Analysis is to acquaint students with some of the central concepts and methods of the social sciences and to show how these approaches can enhance our understanding of contemporary human behavior. Social Analysis courses are not intended to provide a survey of a particular discipline, but rather to show how, by the use of formal theories that are systematically related to empirical data, one can better understand the application of analytical methods to important problems involving the behavior of people and institutions.

Social Analysis

General Education courses that satisfy the Social Analysis requirement

Empirical and Mathematical Reasoning 13 (formerly Social Analysis 46). Analyzing Politics
Societies of the World 24. Global Health Challenges: Complexities of Evidence-Based Policy
Societies of the World 25 (formerly Anthropology 1825). Case Studies in Global Health: Biosocial Perspectives
Societies of the World 31. Political Economy After The Crisis
Societies of the World 40 (formerly Anthropology 1174). The Incas: The Last Great Empire of Pre-Columbian South America
Societies of the World 44. Human Trafficking, Slavery and Abolition in the Modern World
Societies of the World 47. Contemporary South Asia: Entrepreneurial Solutions to Intractable Social & Economic Problems
Societies of the World 49. The Worlds of Business in Modern China - (New Course)
United States in the World 11. American Health Care Policy
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]
[United States in the World 18. Thinking About the Constitution]
[United States in the World 24 (formerly Sociology 19). Reinventing Boston: The Changing American City]
United States in the World 31 (formerly Social Analysis 54). American Society and Public Policy

Departmental courses that satisfy the Social Analysis requirement
The following departmental courses may be taken to meet the Social Analysis requirement. These courses are not necessarily designed for a general audience; they may assume prior experience or more than could be expected of students seeing the subject for the first time.

- **Anthropology 1010. The Fundamentals of Archaeological Methods & Reasoning**
- **Anthropology 1090. Ethnography and Archaeology**
- **Anthropology 1095 (formerly Social Analysis 50). Urban Revolutions: Archaeology and the Investigation of Early States**
- **Anthropology 1640. Language and Culture**
- [Anthropology 1995 (formerly Social Analysis 70). Food, Culture, and Society]
- **Computer Science 105. Privacy and Technology**
- **Economics 10 (formerly Social Analysis 10). Principles of Economics**
- **Economics 1010a1. Microeconomic Theory - (New Course)**
- **Economics 1010a2. Microeconomic Theory - (New Course)**
- **Economics 1010b. Macroeconomic Theory**
- **Economics 1011a. Microeconomic Theory**
- **Economics 1011b. Macroeconomic Theory**
- [Economics 1356. Economics of Work and Family]
- **Government 20. Foundations of Comparative Politics**
- [Government 94q. US-Latin American Relations: Seminar]
- [Government 1100. Political Economy of Development]
- **Government 1295. Comparative Politics in Latin America**
- **Government 1780. International Political Economy**
- **Linguistics 101. The Science of Language: An Introduction**
- **Religion 110. Religion and International Politics**
- **Sociology 24. Introduction to Social Inequality**
- **Sociology 25. Introduction to the Sociology of Organizations**
- **Sociology 43. Social Interaction**
- [Sociology 145. Urban Social Problems]
- **Sociology 165. Inequalities in Health Care**
- **Sociology 190. Life and Death in the US: Medicine and Disease in Social Context**
- **Studies of Women, Gender, and Sexuality 1168. Education, Race, and Gender in the United States**

**Freshman Seminars and House Seminars**
Faculty of the Committee on Freshman Seminars

Jay M. Harris, Harry Austryn Wolfson Professor of Jewish Studies and Dean of Undergraduate Education (Chair)
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Andrew H. Knoll, Fisher Professor of Natural History and Professor of Earth and Planetary Sciences
Sandra Naddaff, Senior Lecturer on Literature and Comparative Literature (ex officio)
Stephanie Sandler, Ernest E. Monrad Professor of Slavic Languages and Literatures
Mary C. Waters, M. E. Zukerman Professor of Sociology
Justin Weir, Professor of Slavic Languages and Literatures and of Comparative Literature (on leave 2012-13)

The Freshman Seminar Program

Freshman Seminars are designed to intensify the intellectual experience of incoming undergraduates by allowing them to work closely with faculty members on topics of mutual interest. Enrollment is limited to the first two terms of students who enter as freshmen. Freshman Seminars are graded SAT/UNS and may not be audited. For information on the Freshman Seminar Program, please visit our website at www.freshmanseminars.college.harvard.edu.

Freshman Seminars 2012-13

*Freshman Seminar 21g. How Did the First Stars and Galaxies Form? - (New Course)
Catalog Number: 74245 Enrollment: Limited to 15.
Abraham Loeb
Since the Universe is expanding, it must have been denser in the past. Therefore, there must have been an early time when stars like our Sun or galaxies like the Milky Way did not exist because the Universe was denser than they are. We therefore face the important question about our origins: how and when did the first stars and galaxies form? Primitive versions of this question were considered in religious and philosophical texts for thousands of years. The Seminar will summarize the fundamental principles and scientific ideas that are being used to address this question in modern cosmological studies.
Note: Open to Freshmen only

*Freshman Seminar 21k. Monsters and Movers in the Deep - (New Course)
Catalog Number: 71208 Enrollment: Limited to 12.
Robert M. Woollacott
Historically, the oceans provided a rich source for the human imagination to invent monsters, create myths, and weave tales of heroic proportion. We will explore some of these fantastic beasts of the sea. In certain instances, they will prove imaginary while in others real, if seemingly improbable. In addition, we will examine some creatures that are or were common in occurrence and have a major role in regulating interactions in the world around them. This
seminar incorporates historical dimensions, but emphasizes contemporary science, and focuses on select fascinating forms of sea life.
*Note:* Open to Freshmen only.
*Prerequisite:* There are no prerequisites

**Freshman Seminar 21l. Talking About Physics - (New Course)**
Catalog Number: 68309 Enrollment: Limited to 15.
*Melissa Franklin and Logan S. McCarty*
*Half course (spring term). W., 1–4.*
What do scientists do? They talk about science. They ask questions, debate the answers, and discuss their observations. As a student in this seminar, you will learn how to talk about physics and how to use drawings and formulas in your discussions. You will learn to pose questions and to tell stories about science. You will become confident in your ability to engage students and faculty in discussions about physics. At the end of the term, you will create a short video in which you answer a scientific question of your own choice through drawings and animations.
*Note:* Open to Freshmen only.

**Freshman Seminar 21o. The Neurophysiology of Visual Perception**
Catalog Number: 7584 Enrollment: Limited to 12.
*David H. Hubel (Medical School)*
*Half course (spring term). W., 1:45–4:45.*
How do the eyes and brain of higher mammals (including humans) deal with visual information originating in the outside world? Starts with brief survey of mammalian brain neuroanatomy and cell-level neurophysiology (nerve conduction, synapses). Covers neurophysiology of the visual path from retina to cortex, with emphasis on transformations in information that occur at each successive level. Studies main components of visual perception: form, color, movement, depth, and considers the bearing of these on art.
*Note:* Meets at the Medical School. Open to Freshmen only.

**Freshman Seminar 21p. Materials, Energy, and Society**
Catalog Number: 74031 Enrollment: Limited to 15. There are no prerequisites.
*David R. Clarke*
*Half course (fall term). M., 2:30–6.*
Advances in materials and energy technology have paced the development of Society from the Stone Age to the present. Today, we are facing an over-reliance on fossil fuels, a growing population, and its consequences on Global Warming. Starting with our current and anticipated future energy needs, this course, which includes substantial weekly laboratory content, explores the role of materials in evolving alternative energy technologies as well as their impact on worldwide resources.
*Note:* Open to Freshmen only.

**Freshman Seminar 21q. Biological Impostors: Mimicry and Camouflage in Nature**
Catalog Number: 8762 Enrollment: Limited to 12.
*Michael R. Canfield*
*Half course (spring term). Th., 2:30–4:30.*
Plants and animals imitate one another and their surroundings to escape notice and avoid
predators. This seminar explores the evolution of mimicry and camouflage using case studies that reveal the range of visual, behavioral, acoustical, and chemical means by which this deception is accomplished.

*Freshman Seminar 21s. Germs*
Catalog Number: 2067 Enrollment: Limited to 12.
Ralph Mitchell

*Half course (fall term). W., 1–4:30.*

Germs are responsible for the disruption of whole civilizations and for the maintenance of the ecological balance on planet Earth. Explores the importance of germs as causative agents of disease in humans, animals, and plants and emerging diseases. Investigates why epidemics occur, the role of germs in the control of the ecological balance on Earth -- how microbes affect the cycling of elements, and climate control. Are there dangers to inserting microbial genes into crops?

*Note:* Open to Freshmen only.

*Freshman Seminar 21w. Research at the Harvard Forest: Global Change Ecology-Forests, Ecosystem Function, the Future*
Catalog Number: 0060 Enrollment: Limited to 11.
David R. Foster

*Half course (spring term). Four weekends at the Harvard Forest in Petersham, MA.*

This course explores state-of-the-art research, tools and measurements used to investigate and predict climate change through ongoing studies at the Harvard Forest’s 3,000 acre outdoor laboratory in Petersham, MA. The seminar consists of three weekend-long field trips (Friday evening-Sunday) to the Harvard Forest and a final on-campus meeting. Students develop skills for evaluating, discussing, and presenting the ecological evidence for climate change, including feedbacks between forests and the atmosphere and long-term impacts on forest ecosystems.

*Note:* Open to Freshmen only. Four weekends at the Harvard Forest in Petersham, MA (Fri, 3pm-Sun, late afternoon) dates TBA. Transportation, accommodations, and meals at the Harvard Forest will be provided.

*Freshman Seminar 21y. The Art and Politics of Molecular Biology*
Catalog Number: 89138 Enrollment: Limited to 12.
Roberto G. Kolter (Medical School)

*Half course (fall term). W., 2–4.*

Objectivity is important in carrying out scientific research, yet it is clear that there are elements of creativity and politics that shape the practice and communication of science. This course explores how individual creativity and political behavior influence scientific pursuits in molecular biology. Harold Varmus’ memoir "The Art and Politics of Science" is read and discussed, followed by diverse activities, including viewing and discussing films that broach scientific topics, e.g. "DNA Story" and "GATTACA".

*Note:* Open to Freshmen only.

*Freshman Seminar 22i. The Science of Sailing*
Catalog Number: 7269 Enrollment: Limited to 12.
Jeremy Bloxham  
*Half course (fall term). W., 6–8 p.m.*

Explores basic physical principles through sailing. Sailboats are driven by the flow of wind across their sails. How does this generate a driving force, how is that force balanced, and how does it scale with the size of the sailboat? Studies the environment in which a sailboat operates, including the origin and variability of the wind, and the interaction of wind with water. Addresses questions of strategy and tactics faced by sailors on race courses.

*Note:* Open to Freshmen only.

*Prerequisite:* Participants in this seminar should have a good high school physics background and have some knowledge of sailing.

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*Freshman Seminar 22k. Guns, Germs, and Stellar Wobble: The Search for Life in the Universe - (New Course)*

Catalog Number: 31891  Enrollment: Limited to 15.

Sarah Stewart-Mukhopadhyay  
*Half course (spring term). W., 2–4.*

How and where did life arise on planets? Is there life in interstellar space? Can life migrate from one planet to another? Are we Martians? This seminar will examine the current research and fundamental principles that govern the rise of life on planets, the transfer of life between planets, and the challenges encountered during interstellar travel.

*Note:* Open to Freshmen only.

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*Freshman Seminar 22m. The Human Brain*

Catalog Number: 6810  Enrollment: Limited to 15.

John E. Dowling  
*Half course (fall term). W., 2:30–4:30.*

Investigates human brain function through famous neurological cases and what we have learned from them: Broca’s patient "Tan" whose case led to the identification of one of the brain’s language areas; Phineas Gage, whose injury to a specific brain region changed his personality dramatically; and patient HM who, after brain surgery, no longer could remember things for more than a few minutes. Readings will be from my book Creating Mind.

*Note:* Open to Freshmen only. This seminar is designed for non-science concentrators.

*Prerequisite:* High school science.

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*Freshman Seminar 22t. Why We Animals Sing (the ways we do)*

Catalog Number: 22509  Enrollment: Limited to 15.

Brian D. Farrell  
*Half course (spring term). M., 2–4:30.*

We will become familiar with sounds and structures of the different kinds of acoustic animals, including birds, mammals, frogs and insects, and the different kinds of habitats in which they produce their songs and calls. We will learn to imitate other species by slowing down their calls and will explore the evolution and biology of music in humans. The capstone will be a performance in the Harvard Museum of Natural History at semester’s end.

*Note:* Open to Freshmen only.
*Freshman Seminar 22z. Quantitative Methods in Public Policy Decisions*
Catalog Number: 8839 Enrollment: Limited to 12.
*Richard Wilson*
*Half course (fall term). W., 2–5:30.*
The seminar will apply scientifically quantitative methods to understanding a number of problems of general public concern, and provide insight into the roles of a scientist in public affairs by understanding diverse problems of the environment, pollution, and public health. The topics will be selected in the first two weeks from those that are topical at the time.
*Note:* Open to Freshmen only.

*Freshman Seminar 23e. The Scientific Method: A Roadmap to Knowledge*
Catalog Number: 14833 Enrollment: Limited to 15.
*Robert Sackstein (Medical School)*
*Half course (spring term). Tu., 4:30–6:30.*
This course is designed to provide a working knowledge of the scientific method, thereby fostering development of fundamental skills in logic and experimental design. The various forms of reasoning (inductive, abductive, deductive) will be discussed in context of the practice of science. Through critical analysis of historical and contemporary scientific reports, students will gain an understanding of creating appropriate hypotheses, of controlled experimentation, and of the breadth and limits of conclusions drawn from experimental data.
*Note:* Open to Freshmen only.

*Freshman Seminar 23k. Insights from Narratives of Illness*
Catalog Number: 1904 Enrollment: Limited to 12.
*Jerome E. Groopman (Medical School)*
*Half course (spring term). W., 1–3.*
A physician occupies a unique perch, regularly witnessing life’s great mysteries; it is no wonder that narratives of illness have been of interest to both physician and non-physician writers. Examines and interrogates both literary and journalistic dimensions of medical writing from Tolstoy to Oliver Sacks as well as newspapers and periodicals. Studies not only mainstream medical journalists, but so called alternative medical writers such as Andrew Weil also. Work with different forms of medical writing.
*Note:* Open to Freshmen only.

*Freshman Seminar 23l. Medicine, Law, and Ethics: An Introduction*
Catalog Number: 4235 Enrollment: Limited to 15.
*Shahram Khoshbin (Medical School)*
*Half course (spring term). M., Th., 7–9 p.m.*
Explores medical, legal, and ethical aspects of medical care, with particular attention to medical decision-making at the beginning and end of life, participants in research on human subjects, human reproductive technologies, mental illness, and experimentation on animals. Historical background of present-day medical practices and relevant law to be discussed.
*Note:* Open to Freshmen only.
*Prerequisite:* All students are welcome, but this seminar is particularly geared to pre-medical and pre-law students. Students are advised that this course is intended to be introductory.
*Freshman Seminar 23m. Nutrition and Public Health*
Catalog Number: 8823 Enrollment: Limited to 15.
Clifford Lo
*Half course (fall term). Tu., 6:30–8:30 p.m.*
Introduction to the critical reading of technical nutrition and medical literature; surveys current issues in public health and public policy relating to nutrition. Critical analysis of different types of medical literature: historical monographs, metabolic laboratory observations, clinical case reports, epidemiological surveys, prospective randomized controlled trials, metaanalyses, and literature reviews. Prepares science and non-science concentrators to examine critically current controversies for themselves; requires active participation and presentation by students.
*Note:* Open to Freshmen only. Clinical rounds with Nutrition Support Services at Children’s Hospital are optional.

*Freshman Seminar 23n. Conflict and Cooperation, From Genes to Society*
Catalog Number: 84343 Enrollment: Limited to 12.
Kirsten Bomblies
*Half course (fall term). M., 3–5.*
Co-evolution, competition and conflict are common in biology, e.g. predator-prey or host-pathogen interactions - with important implications for evolution. Such dynamics also function in human health and society. Conflicts of interest often set in motion perpetually evolving, costly counterstrategies, such as arms races in human society. This seminar will focus on understanding these patterns in biology, and compare and contrast them with similar patterns in society. We will discuss some basic concepts of game theory as a framework to dissect the dynamics of coevolution, conflict and escalation dynamics across biological complexity - from genes to ecosystems and human societies
*Note:* Open to Freshmen only.

*Freshman Seminar 23o. Evolution of Aging*
Catalog Number: 3444 Enrollment: Limited to 15.
Anne E. Pringle
*Half course (spring term). M., 2–4.*
How do we age? WHY do we age? If natural selection can effectively build "better" organisms, should organisms be immortal? This seminar explores both the mechanisms that cause aging, and the hypotheses used to explain its evolution. We will focus on human data and the genetics of aging in human populations, but use examples from across the domains of life to illustrate that aging is a universal phenomenon.
*Note:* Open to Freshmen only.

*Freshman Seminar 23p. Physics, Math and Puzzles - (New Course)*
Catalog Number: 71288 Enrollment: Limited to 15.
Cumrun Vafa
*Half course (spring term). W., 4–6.*
Principles of modern physics are based on simple but at the same time deep concepts. Many of these concepts are naturally encountered when solving mathematical puzzles. The aim of this seminar is to illustrate the connection between physics and mathematics and use simple ideas and puzzles to shed light on this relation. We will also draw upon ideas encountered in the context of
string theory and higher dimensional realizations of our universe. Recommended for students deeply interested in both physics and mathematics.

Note: Open to Freshmen only. This seminar is recommended for students with a strong background in both math and physics and with keen interest in the relation between the two subjects.

*Freshman Seminar 23u. Gravity in Extremes: Black Holes in the Universe - (New Course)
Catalog Number: 40994 Enrollment: Limited to 15.
Julia C. Lee
Half course (fall term). W., 3–5.
The existence of black holes was debated through the last decades of the 20th century. Now, it is believed they exist in most, if not all galaxies, including our own. What has changed? In this course, as students read from popular articles (e.g. Scientific American, Nature and others) based on the latest scientific research and modern instruments, they will explore black holes through gravity’s eyes, from its formation to its evaporation, and associations (if any) with dark matter. The course will end with a brief look at antigravity, a.k.a. dark energy?

Note: Open to Freshmen only

*Freshman Seminar 24e. The Physics and Applied Physics Freshman Research Laboratory
Catalog Number: 3573 Enrollment: Limited to 12.
Jene A. Golovchenko
Exposes students considering careers in science or engineering to environment of a modern research laboratory. Research teams construct, perform, analyze, and report on cutting-edge experiments in physical, engineering, and biological sciences. Projects provide insight into the mathematical, mechanical, electronic, chemical, computational, and organizational tools and skills that characterize modern experimental science. Past projects focused on atomic, nuclear, and solid state physics, materials science, dynamical systems, and biophysical science. Projects highlight both team and individual effort.

Note: Open to Freshmen only.

*Freshman Seminar 24g. A Brief History of Surgery
Catalog Number: 74216 Enrollment: Limited to 15.
Frederick H. Millham
Half course (fall term). Th., 7–9 p.m.
In this seminar, students explore the historical foundation of modern surgical practice. They will study the medical notions of the ancients, and then see these notions overturned in The Enlightenment. Advances of the 19th century will be studied in detail. We will end with a session on combat casualty care, aided by an experienced combat surgeon. Students will write a 5 page paper on a topic in surgical history and will present their work to the class.

Note: Open for Freshmen only.

*Freshman Seminar 24k. The Surprising Science of Happiness
Catalog Number: 21444 Enrollment: Limited to 15.
Nancy Lee Etcoff (Medical School)
Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18
After a century of studying how to cure mental illness, scientists have started to explore what makes us happy. What have they discovered? In this course, we will critically examine the findings from the new science of happiness revealing how they are altering our understanding of what happiness is, the optimal ways to achieve and increase it, the role of circumstance in its occurrence, its effect on our bodies, and its place in human nature.

*Note: Open to Freshmen only.*

**Freshman Seminar 24n. Child Health in America**  
Catalog Number: 6367 Enrollment: Limited to 12.  
Judith Palfrey (Medical School) and John G. Palfrey  
Reviews history of children’s health care in the United States; explores the impact of geography, environment, nutrition, clean water, as well as scientific discoveries of the late 19th and the early 20th centuries and the emergence of high technology care in middle and late 20th century. Does America provide children the best possible health care available? Compares United States epidemiology with that of other developed and developing nations. Explores how child health delivery is financed.  
*Note: Open to Freshmen only.*

**Freshman Seminar 24p. Getting to Know Charles Darwin**  
Catalog Number: 36551 Enrollment: Limited to 12.  
William Friedman  
Half course (full term). W., 2–6.  
We will read a selection of Darwin’s publications, as well as his private correspondence, paying close attention to the man behind the science as revealed by his writings. We will get to know Darwin, the avid breeder of pigeons, lover of barnacles, devoted father and husband, gifted correspondent and tactician, and remarkable backyard scientist. Together, the class will reproduce ten of Darwin’s classic Down House experiments and observations that were central to his case for natural selection and evolution.  
*Note: Open to Freshmen only.*

**Freshman Seminar 24u. "How Did I Get Here?"--Appreciating "Normal" Child Development**  
Catalog Number: 81872 Enrollment: Limited to 15.  
Laura Marie Prager (Medical School)  
How do we conceptualize "normal" growth and development? In this seminar, we will examine stages of child development from many vantage points: neurobiological, physical, cultural, and psychological. Readings will include classic papers on development, textbook chapters that provide overviews of specific developmental stages, recently published research articles on brain development and genetic inheritance, selected contemporary children’s and young adult literature, personal memoirs, and short stories written about childhood. We will also examine clips from contemporary films. Assignments will consist of three short response papers and a longer final paper. There are no prerequisites for this course.  
*Note: Open to Freshmen only.*
*Freshman Seminar 24w. Minds, Brains, and Computers: The Philosophy of Artificial Intelligence*

Catalog Number: 53572 Enrollment: Limited to 15. No background in either philosophy or computer science is necessary.

Güven Güzeldere

_Half course (fall term). M., 3–5._

This seminar examines philosophical questions underlying Artificial Intelligence (AI) and the idea of understanding the mind/brain as a computing machine. Can machines have mental capacities, thought, language, emotions, a sense of self? Are we simply machines ourselves, but a different (biological and non-digital) kind? What makes human beings uniquely what we are? We will study these questions in the works of both AI researchers and their various critics in an interdisciplinary analysis and discussion format.

_Note:_ Open to Freshmen only

*Freshman Seminar 25e. Autism - (New Course)*

Catalog Number: 92389 Enrollment: Limited to 15.

Charles A. Nelson (Public Health)

_Half course (fall term). M., 1–3._

Autism is an increasingly common disorder, frequently found in the popular press and Hollywood movies. It affects roughly 1:100 individuals, approximately 500 times the rate of just a few decades ago. Sadly, despite the considerable financial resources devoted to the study of autism we still do not know what causes the disorder, why its severity varies so enormously from person to person and how best to treat it. This seminar will be broad in scope, focusing on the following key themes: genetic, neurological and possibly environmental causes of autism, risk factors for developing the disorder, best way to characterize the disorder, best treatment options.

_Note:_ Open to Freshmen only. Note: The instructor will arrange field trips to various clinics that provide services for individuals with autism.

*Freshman Seminar 25g. The Impact of Infectious Diseases on History and Society*

Catalog Number: 8075 Enrollment: Limited to 15.

Donald A. Goldmann

_Half course (fall term). Th., 7–9 p.m._

Mankind’s journey- farming, urbanization, exploration, trade, globalization -has been marked by devastating encounters with infectious diseases. Infections have affected wars, political dynasties, global balance of power, social structure, public health policy, economics, and the arts. This course explores these themes by studying infections such as plague, syphilis, smallpox, malaria, sleeping sickness, tuberculosis, cholera, yellow fever, polio, and influenza. It investigates how the epidemiology of these diseases, and society’s response, inform contemporary policy and future threats.

_Note:_ Open to Freshmen only.

*Freshman Seminar 25i. On the Witness Stand: Scientific Evidence in the American Courts*

Catalog Number: 81814 Enrollment: Limited to 15.

Sean Tath O’donnell

_Half course (fall term). Th., 3–6._
Scientific evidence serves as a powerful witness in the courts. This seminar focuses on social, historical and theoretical problems in the interaction of law and science. The course coverage includes scientific evidence such as x-rays, fingerprinting, ballistics, lie detectors and DNA. Particularly, the seminar investigates the legal strategies used to demarcate pseudo-science from legitimate science, to establish expertise and legitimize both scientific and legal authority. In turn, the seminar considers recent proposals for reform.

*Freshman Seminar 25j. Evolutionary Biology: the Lizard Perspective - (New Course)*
Catalog Number: 33875 Enrollment: Limited to 15.
Jonathan Losos
*Half course (fall term). W., 2:30–6.*

Lizards are one of life’s great success stories. As old as the dinosaurs, lizards are now one of the most diverse types of vertebrate animal, with more than 9,000 living species. Lizards show an amazing diversity of adaptations: live birth has evolved 100 times; limbs have been lost in dozens of lineages. In addition, lizards have evolved horns, spines, multiple penises, venom, parental care, asexuality, and the ability to see by detecting infrared radiation. This seminar will focus on the workings of evolution and how research on lizards has played a key role in advancing our understanding of the field.

*Freshman Seminar 25k. You Are What You Eat*
Catalog Number: 3913 Enrollment: Limited to 15.
Karin B. Michels
*Half course (fall term). M., 4–6:30.*

What does food do to our bodies? What does a healthy diet entail? What is known about the role of nutrition in preventing or curing disease? Explores and critically evaluates diet recommendations, current knowledge about the role of diet in maintaining health, and use of nutrition to treat disease. Discusses how studies are conducted to understand the impact of nutrition. Explores different diets and the obesity epidemic, its causes and its implications for the next decades.

*Freshman Seminar 25n. Understanding Psychological Development, Disorder and Treatment: Learning through Literature and Research*
Catalog Number: 9589 Enrollment: Limited to 12.
Nancy Rappaport (Medical School)
*Half course (fall term). W., 3–5.*

Deepens understanding of human development and how individuals cope with serious emotional or social difficulties (neglect, bipolar disorder, autism, depression). We will use multiple perspectives: medical texts that provide practical knowledge, narrative readings to understand how patients experience the meaning of illness, speaking with patients about their experiences, and portrayals of development-related mental illness in the press. Examines the fundamental need for tenderness and making meaning, the resourcefulness required for resiliency and the
context of vulnerability.

*Note*: Open to Freshmen only.

**Freshman Seminar 25o. Building a Living Cell One Brick at a Time - (New Course)**
Catalog Number: 48982 Enrollment: Limited to 12.

*Alain Viel*

*Half course (fall term). W., 2–5.*

Synthetic biology is an emerging multi-disciplinary field of research aimed at developing solutions to problems impacting our individual lives and ultimately our long-term survival as a species. We need to find alternative and renewable sources of energy and food, new ways to process and recycle limited resources, and tools to detect and address environmental pollutants. These and other challenges can be addressed by the development of microorganisms re-engineered to perform new functions. In this "hands-on" laboratory course students will design experiments and build and then test synthetic biological systems. Additionally, students will present and discuss selected topics in synthetic biology.

*Note*: Open to Freshmen only

**Freshman Seminar 25p. Neurotoxicology: Biological Effects of Environmental Poisons**
Catalog Number: 1838 Enrollment: Limited to 15.

*S. Allen Counter (Medical School)*

*Half course (fall term). W., 2–4.*

Explores wide range of environmental neurotoxic substances and effects on human and animal populations. Attention to pediatric exposure to neurotoxic agents and associated neurodevelopmental disabilities, as well as neurobehavioral and immunological changes. Examines impact of lead and mercury poisoning, PCBs. Investigates neurophysiology and neurochemistry of a number of other neurotoxins, including arsenic, tetrodotoxin, saxitoxin, botulinum, curare, cocaine, and "nerve gas." What dangers do these toxins pose? What can or should be done to prevent exposure?

*Note*: Open to Freshmen only

**Freshman Seminar 25q. Understanding Emotions - (New Course)**
Catalog Number: 94303 Enrollment: Limited to 15.

*Matthew Gordon Leeds*

*Half course (fall term). Th., 3–5.*

Large and small, simple and complex, self-evident and confusing, emotions in all their variety are a fundamental part of life. But just what are emotions? Are they the same in all cultures? What, if any, functions do they serve? Can we control our emotions? What role do they play in development, personality, relationships and well-being? What effects can they have on physical health? And do they present special challenges to scientific study? This seminar will take up these and other fundamental questions, and will discuss methods used to study emotion and the current state of knowledge about human emotion.

*Note*: Open to Freshmen only

**Freshman Seminar 25s. Life in Motion - (New Course)**
Catalog Number: 95426 Enrollment: Limited to 12.

*Stacey A. Combes*
Half course (fall term). W., 2–5.
Nearly all organisms must move at some point in their life - whether they are searching for food, courting mates, escaping from predators, or colonizing new habitats. Even sedentary plants and fungi have evolved diverse mechanisms for dispersing progeny away from parents. Because of its central role in growth, reproduction and survival, movement drives the evolution of unique structures and behaviors, and affects the dynamics of biological communities. This course provides an overview of how and why a variety of organisms move, from ballistic fungal spores that generate their own wind currents to sprinting cockroaches that run on two legs.

Note: Open to Freshmen only

*Freshman Seminar 25w. Responsibility, the Brain, and Behavior*
Catalog Number: 0049 Enrollment: Limited to 15.
Ronald Schouten (Medical School)
Half course (fall term). Tu., 7–9 p.m.
Explores philosophical and legal bases of the concept of individual responsibility as applied in the criminal justice system. Examines how forensic mental health professionals assess an individual’s mental state at time of an alleged criminal act, the legal standards applied, and the social and political forces that help shape the legal decision. Considers the insanity defense; examines modern concepts of the biological basis of behavioral disorders and their relationship to existing standards of criminal responsibility.

Note: Open to Freshmen only.

*Freshman Seminar 25x. Human Brain in Health and Disease: A Neurologist’s Perspective*
- (New Course)
Catalog Number: 25887 Enrollment: Limited to 15.
Thomas Byrne
Half course (fall term). Tu., 7–9 p.m.
Brain function serves as the basis for how we make rational and irrational decisions, learn to read or not (dyslexia), learn and remember or not (amnesia), empathize and understand the perspective of another or not (autism). The mind is shaped by the interaction of the brain and environment. Our understanding of the brain enables us to attempt to modify the environment to enhance the mind. This course will look at these issues in individuals with normal brain function and those with neurological disorders. The course is intended for those who have scored -5- on AP Biology or Chemistry.

Note: Open to Freshmen only.

*Freshman Seminar 25z. Stress and Disease (Biobehavioral Aspects of Health and Disease)*
Catalog Number: 1691 Enrollment: Limited to 12.
Donald B. Giddon (Dental School)
This seminar on biobehavioral bases of health and disease focuses on the interaction of injurious or infectious agents and the physical and social environment in the development and maintenance of stress-related disorders. What factors are stressful for given individuals? What are the pathophysiological and/or behavioral pathways to disease? Why is a particular body organ system the target of stress? What psychological, social, and economic factors influence
cognitive, affective/physiological, and behavioral responses to disease?
Note: Open to Freshmen only. Most class meetings will be at the Medical School.

*Freshman Seminar 26f. Dreams: Our Mind by Night
Catalog Number: 91442 Enrollment: Limited to 15.
Deirdre Barrett
This course examines dreams with an emphasis on their relation to the creative process and problem solving. It draws on psychology predominantly—neurophysiology, clinical, and personality research. The course also includes perspectives from history, religion, art, literature, and anthropology. We’ll visit a sleep laboratory and attend a dream-related arts event. Students will keep a dream journal, participate in experiential exercises with their dreams, and write a term on a dream-related topic of their choice.
Note: Open to Freshmen only.

*Freshman Seminar 26i. The Astronomy Research Seminar - (New Course)
Catalog Number: 90348 Enrollment: Limited to 12.
David Charbonneau
In the past few years, astronomers have made remarkable discoveries that include the detection of the first Earth-sized exoplanets, studies of the formation of black holes from supernova, and new insights into the dark energy that dominates our universe. With the mentorship of scientists at the Harvard Smithsonian Center for Astrophysics, you will work in a small team to investigate an unanswered question in astronomy. This seminar offers the opportunity to experience the real day-to-day working of scientific research, and students will be invited to present their work at the national meeting of the American Astronomical Society.
Note: Open to Freshmen only

*Freshman Seminar 26j. The Universe's Hidden Dimensions
Catalog Number: 7529 Enrollment: Limited to 15.
Lisa Randall
Based loosely on book, Warped Passages, considers revolutionary developments in Physics in early 20th century: quantum mechanics and general relativity; investigates key concepts which separated these developments from the physical theories which previously existed. Topics: particle physics, supersymmetry, string theory, and theories of extra dimensions of space. We will consider the motivations underlying these theories, their current status, and how we might hope to test some of the underlying ideas in the near future.
Note: Open to Freshmen only.

*Freshman Seminar 26s. Mathematical Structures and Gödel’s Completeness Theorem
Catalog Number: 0012 Enrollment: Limited to 12.
Gerald E. Sacks
Half course (spring term). W., 4–6.
Mathematics is about structures. Some examples of structures are: the integers, the real numbers, and Euclidian plane geometry. Model theory, a branch of mathematical logic, provides a useful
definition of structure. Gödel’s completeness theorem shows how logically consistent definitions imply the existence of arbitrary mathematical structures. Model theory is applicable to problems that arise in algebra. An example is: the elementary theory of the real numbers is decidable.

*Note:* Open to Freshmen only.

*Prerequisite:* High school algebra and a strong interest in fundamental mathematical problems.

**Freshman Seminar 26u. What is Mental Illness?**

Catalog Number: 9123 Enrollment: Limited to 12.

*Michael William Kahn (Medical School)*

*Half course (fall term). M., 2:30–5.*

Introduces students to the nature of mental illness based on recorded interviews of people suffering from a variety of psychiatric conditions. Investigates what illness and treatment are like from patient’s perspective. Interviews supplemented by readings which include a variety of patient narratives. Provides background on categories of mental illness, the varieties of treatment available, and the nature of the illness experience itself.

*Note:* Open to Freshmen only.

**Freshman Seminar 26v. Blood: From Gory to Glory**

Catalog Number: 9017 Enrollment: Limited to 10.

*David T. Scadden*

*Half course (fall term). W., 1:30–3:30.*

Humans have long understood that the blood flowing in their veins was imperative to their health and well-being. This course will examine the history, attitudes and beliefs surrounding blood. We will study human beliefs about blood and its uses in cultural beliefs and ceremonies. We will examine the science associated with blood: the production and the function of blood in the body, ideas of blood regarding medicine, healing, blood-related illnesses, biotechnology, nanotechnology and stem cell research.

*Note:* Open to Freshmen only.

**Freshman Seminar 26w. The Biology and Science of Cancer and Its Treatments: From Empiric to Scientific to Humanistic**

Catalog Number: 63338 Enrollment: Limited to 15.

*George Daniel Demetri*

*Half course (spring term). W., 2–4.*

"Cancer" represents hundreds of different diseases with a wide variety of causative mechanisms. We will study the biology of cancer and what makes a normal cell become a cancer one, delving into acquired and inherited genetic abnormalities and effects of environmental factors, such as nutrition, radiation, and tobacco. Current approaches to cancer will be discussed from prevention and early detection to treatment of survivorship.

*Note:* Open to Freshmen only.

**Freshman Seminar 26z. What is Life?**

Catalog Number: 20722 Enrollment: Limited to 15.

*Guido Guidotti*

*Half course (fall term). Th., 3–5.*
This seminar considers the conditions of a cell necessary to support life. The proposal is to find a definition for a living system using information and principles of biology, chemistry and physics to characterize some central properties of living cells, like energy and material uptake and use, cellular crowding, diffusion and molecular interactions, homeostasis and growth.

*Freshman Seminar 27e. Big Ideas*
Catalog Number: 85241 Enrollment: Limited to 15.

Douglas A. Melton
Half course (spring term). Th., 4–6.

This course aims to introduce freshman to some of the world’s most important ideas and disciplines. It is the conceit of this course that there are precious few important ideas that have relevance beyond their specific disciplines, but it is these very ideas that form a foundation for a modern college education. The course is designed to give students an introduction to a variety of concentrations in a way that allows them to explore unfamiliar territory and ask leading questions, and look at a variety of subjects in a new light, before choosing any pre-determined field to study in college.

*Note:* Open to Freshmen only. Professor Nicholas Christakis will not be co-teaching the seminar this spring term as originally planned.

*Freshman Seminar 27g. Microbes and the Media*
Catalog Number: 31883 Enrollment: Limited to 15.

Karine A. Gibbs

How has journalism shaped our perspectives on science? In this course, we will critically examine the science behind newspaper articles with an emphasis on microbes making news in disease outbreaks, public policy, and technology developments, focusing on scientific fidelity, the motivation behind publication, and impact on public opinions. We will cover newspaper articles and scientific literature through weekly group discussions.

*Note:* Students interested in journalism or science are encouraged to participate. Open to Freshmen only.

*Prerequisite:* No prior knowledge of microbiology is needed; this class requires a basic (high school) understanding of biology.

*Freshman Seminar 27i. Global Health: Comparative Analysis of Healthcare Delivery Systems - (New Course)*
Catalog Number: 38826 Enrollment: Limited to 15.

Sanjay Saini
Half course (fall term). Th., 3–5.

This discussion seminar will allow students to obtain greater understanding of global health issues through critical comparative analysis of national healthcare systems of selected countries from the developed, emerging and developing world. Weekly sessions will comprise of a case-based and discussion focused session. Each course will inspire discussion that revolves around a central question relevant to each healthcare topic. Student teams will explore in-depth and over the final two sessions present to the entire class an important issue facing a country’s healthcare
Note: Open to Freshmen only

*Freshman Seminar 30g. Digging Up the Past: Harvard and Egyptian Archaeology - (New Course)
Catalog Number: 56101 Enrollment: Limited to 12.
Peter Der Manuelian
Explores the spectacular history and discoveries of the 40-year Harvard-MFA (Museum of Fine Arts, Boston) Expedition to 23 sites in Egypt and Nubia (1905-1947). Topics include the early development of responsible archaeological method, famous finds and explorers, Western colonialism/imperialism in Egypt, early Harvard and MFA history, archival research, and the current debate on repatriation of artifacts. Field trips to museum collections, and exciting new digital technologies (such as 3D Giza Pyramids in Harvard’s Visualization Center) applied to early 20th century archaeology.
Note: Open to Freshmen only.
Prerequisite: There are no prerequisites.

*Freshman Seminar 30j. The Folklore of Gaelic Scotland - (New Course)
Catalog Number: 90837 Enrollment: Limited to 15.
Simon R. Innes
This course surveys the ‘treasure house’ of Gaelic folklore recorded in the Highlands of Scotland since the nineteenth century. The controversy over MacPherson’s Ossian poems in the 1760s ensured international interest in this material. Folklorists have found a wealth of orally recorded prose tales and song. This includes tales of ancient heroes such as Finn McCool, beliefs in malevolent fairies, seal people, dangerous water-horses, the evil eye and second sight. This course also introduces international scholarly approaches to folklore and considers the Gaelic material in this light.
Note: Open to Freshmen only. No knowledge of Scottish Gaelic language or literature is assumed or required for this course.

*Freshman Seminar 30l. George Balanchine: Russian-American Master
Catalog Number: 7650 Enrollment: Limited to 15. No knowledge of ballet and its vocabulary is required or assumed.
John E. Malmstad
Half course (fall term). W., 3–6.
Addresses the life and major works of the Russian-American ballet master George Balanchine. Focus on his view of dance and on analysis of the ballets that he made in a career that spanned some sixty years in Russia, Europe, and the United States. Considers the relationship of his works to the intellectual and cultural climate in which they were made. Over 20 ballets to be examined.
Note: Open to Freshmen only.

*Freshman Seminar 30m. California in the 60s - (New Course)
Catalog Number: 50386 Enrollment: Limited to 15.
Katherine van Orden  
*Half course (spring term). W., 4–6.*  
This seminar examines American youth culture in the "long" 1960s through the lens of music in California. Both "popular" and "art" music will be considered, including the early minimalists, L.A. and the Laurel Canyon crowd, and San Francisco psychedelia. In addition to understanding musical forms, performance styles, and the effects of technology (radio, recording, electric instruments), the class will delve into the politics of race, gender, and the draft.  
*Note: Open to Freshmen only.*

**Freshman Seminar 30o. What is College and What is It For?**  
Catalog Number: 1897 Enrollment: Limited to 15.  
Paul J. Barreira (Medical School)  
*Half course (spring term). W., 3–5.*  
Seminar asks students to think and write critically about American higher education--its history, purpose and ongoing challenges. Considers "the uses of the university" from a variety of perspectives: historical, sociological, economic, and developmental. Addresses questions: What constitutes a liberal arts education? What are its goals? How should students be assessed? What role do extracurricular activities play in a college education? Does bachelor’s degree certify a vocational education, a cultural one, or a moral one?  
*Note: Open to Freshmen only.*

**Freshman Seminar 30t. The Novel in the Twenty-First Century - (New Course)**  
Catalog Number: 24541 Enrollment: Limited to 15.  
Timothy M. Wientzen  
*Half course (spring term). M., 3–5.*  
This course seeks to understand the unique historical moment of our early century through close attention to some of its most significant literary artifacts. We will examine how the novel, as a literary form, has incorporated, challenged, and built upon new communication networks, transnational social affiliations, the rise of genetic engineering, and the looming collapse of our biosphere. How does the novel, once the repository of cultural memory, relate to history—and the danger of forgetting—in a world increasingly geared toward instantaneity? And, most importantly, how does the twenty-first century novel imagine alternatives to our most serious social perils?  
*Note: Open to Freshmen only.*

**Freshman Seminar 31g. The Pleasures of Japanese Poetry: Reading, Writing, and Translation**  
Catalog Number: 1645 Enrollment: Limited to 15.  
Edwin A. Cranston  
*Half course (fall term). W., 2–5.*  
Reads classical waka, its modern descendant the tanka, and examples of linked verse (renga) and modern poems in free and prose-poem forms. (And haiku too!) Focuses on themes such as desire, renunciation, time, memory, war, death, sorrow, and receptivity. Students keep a diary of their encounters with the new poetry, practice the art of sequencing, and make their own translations based on literal renderings and explanations of Japanese originals.  
*Note: Open to Freshmen only.*
*Freshman Seminar 31j. Skepticism and Knowledge*
Catalog Number: 9760 Enrollment: Limited to 12.
*Catherine Z. Elgin (Education School)*
*Half course (fall term). Tu., 3–5.*
What can we know; how can we know it? Can I know that I am not a brain in a vat being manipulated into thinking that I have a body? Can I know that Lincoln was assassinated, that $E=MC^2$, that Hamlet is better than Harry Potter, that the sun will rise tomorrow? This seminar will study skeptical arguments and responses to skepticism to explore the nature and scope of knowledge.
*Note:* Open to Freshmen only.

*Freshman Seminar 31n. Beauty and Christianity*
Catalog Number: 4682 Enrollment: Limited to 12.
*Robert J. Kiely*
*Half course (fall term). W., 2–4.*
Jesus has inspired great works of art, literature, and music, but Christians have not always agreed on the function of beauty. This seminar will consider Christian aesthetics, art (Italian Renaissance), and music (Bach, Messiaen, and spirituals), but the focus will be on literary works of St. Francis, Dante, Herbert, Donne, Hopkins, Hawthorne, Melville, C.S. Lewis, and O’Connor. The abiding question will be: In what ways does aesthetic form-- beauty-- enhance, qualify, complicate, or obscure the gospel?
*Note:* Open to Freshmen only.

*Freshman Seminar 31o. Negotiating Identity in Postcolonial Francophone Africa and the Caribbean*
Catalog Number: 6293 Enrollment: Limited to 15.
*Mylène Priam*
*Half course (fall term). Th., 2–4.*
Explores the question of postcolonial identity through the trans-regional study of literature, poetry, cultural works, and critical theory from Africa and the Caribbean. Provides an overview of the major theoretical definitions of the postcolonial in an attempt to find formulations of postcolonial identity not only in terms of aesthetic, but also historical, geographical, linguistic, and institutional discourses. Reading will include "Diaspora Texts" in French and English.
*Note:* Open to Freshmen only.

*Freshman Seminar 31t. The Modern Image: Intersections of Photography, Cinema, and Italian Culture*
Catalog Number: 1467 Enrollment: Limited to 15.
*Giuliana Minghelli*
*Half course (fall term). M., 2–4.*
How are literary, photographic, and cinematographic visions connected? Investigates these issues through the study of major 20th-century Italian novels and films. Contrasts early literary dreams to appropriate the objectivity of the photograph with mythic fear of being appropriated by the machine. Studies how visual language and movie storytelling became the new training ground for the literary imagination; examines texts that openly mix narrative and photography.
Investigates the boundaries of visual and written texts.  

*Freshman Seminar 32v. The Art of Storytelling*  
Catalog Number: 7011 Enrollment: Limited to 12.  
Deborah D. Foster  
*Half course (spring term). Tu., 2–4.*  
People everywhere tell stories to express both the verities and contradictions found in experiences of everyday life. Based on storytelling traditions, a narrator shapes the story to reflect his or her own intentions, making it personally expressive as well as publicly meaningful to a particular audience. This seminar examines the nature of storytelling, its enduring appeal, and its ability to adapt to multiple technologies (print, film, internet). Participants engage in the storytelling process itself.  

*Note: Open to Freshmen only.*

*Freshman Seminar 32x. Topics in Indo-Tibetan Buddhism*  
Catalog Number: 2937 Enrollment: Limited to 12.  
Leonard W. J. van der Kuijp  
*Half course (spring term). Th., 3–5.*  
Through the study of Tibetan Buddhism, students will consider important issues of cultural contact by investigating a series of interrelated topics that have played a significant role in Tibetan history and that are connected to Tibet’s acculturation to Buddhism in the eighth and ninth centuries. After developing a sense of the historic role of Buddhism in Tibetan life, students will consider the role of Buddhism and the Dalai Lama in contemporary Tibetan culture and society.  

*Note: Open to Freshmen only.*

*Freshman Seminar 33o. Animation—Getting Your Hands On Time*  
Catalog Number: 37616 Enrollment: Limited to 12.  
Ruth S. Lingford  
*Half course (spring term). W., 1–4; F., 1–3.*  
Experimentation with a variety of animation techniques leads to new perspectives on time in this practice-based seminar. Practical assignments using drawing, pixillation, strata-cut and time-lapse will build into students making a short animated film, individually or in groups.  

*Note: Open to Freshmen only.*

*Freshman Seminar 33x. Complexity in Works of Art: Ulysses and Hamlet*  
Catalog Number: 6673 Enrollment: Limited to 12.  
Philip J. Fisher  
*Half course (fall term). M., 2–4.*  
Do inherited forms found in literature permit only certain variations within experience to reach lucidity? Investigates literature’s limits in giving account of mind, everyday experience, thought, memory, full character, and situation in time. Studies Shakespeare’s Hamlet and Joyce’s Ulysses, a modern work of unusual complexity and resistance to both interpretation and to simple comfortable reading. Reading these two works suggests potential meanings for terms like
complexity, resistance, openness of meaning, and experimentation within form.

*Note: Open to Freshmen only.

**Freshman Seminar 34o. You and Your Camera - (New Course)**
Catalog Number: 40867 Enrollment: Limited to 12.
*Peter S. Pershan*

*Half course (spring term). W., 4–6.*

The goal of representing the 3-dimensional world on a 2-dimensional surface dates back to the approximately 30,000 year old cave drawings. For all of these past centuries there were relatively few people who could create realistic 2 dimensional images of the people and things that wanted preservation. Although photography has changed this there are still significant differences between the images that most people create and the photographs of our leading photographers. In this seminar we will discuss the artistic history, the nature of vision and the practical physics of photography with the goal of making for better photographers.

*Note: Open to Freshmen only.*

*Prerequisite: Prerequisites: Familiarity with the basics of single variable calculus

**Freshman Seminar 34s. The Art of Noticing - (New Course)**
Catalog Number: 55974 Enrollment: Limited to 12.
*Gordon Teskey*

*Half course (fall term). M., 3–5.*

A seminar on aesthetics, or techniques for active noticing when writing about poetry, music and art. Derived from a Greek word for ‘perception,’ aesthetics in the eighteenth century changed from the philosophical investigation of perception to meditation on art, according to such general concepts as ‘the beautiful’ and ‘the sublime.’ This course returns aesthetics to the field of perception by attending to details one does not normally see and deciding which are important. In addition to classroom work, there will be visits to Harvard and Boston museums. Students will write essays and keep a journal.

*Note: Open to Freshmen only.*

**Freshman Seminar 34t. Experimental Fiction**
Catalog Number: 72244 Enrollment: Limited to 12.
*George G. Grabowicz*

*Half course (fall term). M., 2–4.*

Experimentation in modern prose fiction as a challenge to formal conventions, to "content" and to society. Examines the role of the fantastic; play with narrative, perspective and authorial identity; stream-of-consciousness, fragmentation and collage; mixing of genres and modes; hypertextuality, intertextuality and parody; constraints (lipograms), and the intersection of prose, poetry and visual art. Focuses on the works of Kafka, Joyce, Beckett, Gertrude Stein, Nabokov, Robbe-Grillet, Barthelme, Pynchon, Pavic, Calvino and the OULIPO group.

*Note: Open to Freshmen only.*

**Freshman Seminar 34w. Mobility and Confusion-Film in East Asia - (New Course)**
Catalog Number: 64089 Enrollment: Limited to 15.
*Alexander Nikolas Zahlten*

*Half course (fall term). F., 10–12; and Th., 7–9 p.m. for film screenings.*
This course will map the circulation of key discourses of the 20th and 21st century within East Asia through film and moving image media. Drawing on a spectrum of approaches from film theory, communication studies and political economy, it will distinguish different levels on which film in East Asia has participated in discourses from modernity to decolonization, from Cold War ideology to neoliberal economic policy. The class will focus on the interaction, coordination and constant (productive?) confusion that such movement entails, and will encourage exploring these disjunctures through creative exercises.

*Note: Open to Freshmen only

**Freshman Seminar 34z. Pressing the Page: Making Art with Letters, Paper & Ink**
Catalog Number: 97712 Enrollment: Limited to 12.
Instructor to be determined
This seminar makes art out of language, letter, and type. We print poetry with a vintage letterpress, turn poems into drawings, and transform books into sculptures. To make this art, we rely on a variety of tools: metal type, disappearing inks, and even drill bits will help us physically expose how poetry uses language. In the process, we learn to work with a variety of limits to see constraint as fundamental to creativity.

**Freshman Seminar 35n. The Art and Craft of Acting**
Catalog Number: 21542 Enrollment: Limited to 14.
Remo Francisco Airaldi
Half course (fall term). M., 4–6.
Provides an introduction to acting by combining elements of a discussion seminar with exercises, improvisations and performance activities. Uses improvisation to develop characters, improve group/ensemble dynamics and to minimize habitual behaviors. Explores a range of historical and contemporary acting techniques including those of Stanislavsky, Sanford Meisner, Stella Adler, Uta Hagen, Jerzy Grotowski, Peter Brook and others. Students also attend and critique performances at the Loeb Drama Center.
Note: Open to Freshmen only. Students will be required to attend theater performances during the course of the term. There will be no charge to the student.

**Freshman Seminar 35s. Movement and Meaning: Dance, Culture, and Identity in the 20th Century**
Catalog Number: 46522 Enrollment: Limited to 15.
Jessica Berson
This course examines the history of Western theatrical and social dance through the course of the twentieth century, including the development of modern dance, contemporary ballet, popular dance, and dance in film and television. Students will be invited to think critically about dance and also to dance themselves (no prior dance experience required). Artists under consideration include Martha Graham, George Balanchine, Alvin Ailey, Judson Church Dance Theater, and Jawole Willa Jo Zollar, among many others.
Note: Open to Freshmen only.
*Freshman Seminar 35t. Movies without Fiction - (New Course)
Catalog Number: 77282 Enrollment: Limited to 12.
Alfred F. Guzzetti
Explores the broad spectrum of ways that filmmakers worldwide have for more than a century translated perceived realities into nonfiction films. What is nonfiction and where is the border between it and fiction? What forms does the nonfiction film create or appropriate and how do they shape the way we perceive and understand our world?
Note: Open to Freshmen only

*Freshman Seminar 35z. The Modern Political History of the Arab World: From Kings and Presidents for Life to the Arab Spring - (New Course)
Catalog Number: 43904 Enrollment: Limited to 12.
E. Roger Owen
Examines the establishment of Arab authoritarian regimes after WW2 as a result of pressures to protect their new-found sovereignty. Then the nature of the political and economic forces that first encouraged the rulers of the Arab republics to try to establish family dynasties of a crony-capitalist variety, and then lead to their challenge and overthrown by popular movements aiming to create a wholly new constitutional order. Attention will also be paid to the impact of these developments on relationships with the Arab monarchies as well as the three non-Arab Middle Eastern states, Iran, Israel and Turkey.
Note: Open to Freshmen only

*Freshman Seminar 36e. African American Visions of American Empire - (New Course)
Catalog Number: 28006 Enrollment: Limited to 15.
John L. Barnard
This course will examine literary and political writings from the 18th Century through today, in which African American writers critique the project of American empire. While the acknowledgement of both the reality of American empire and its potential for imperial decline marks a shift in recent mainstream American thinking, this view of America’s less felicitous Roman typology has a long history in African American political commentary and literary writing. This course will trace that history from its beginnings through today.
Note: Open to Freshmen only

*Freshman Seminar 36x. Money Matters - (New Course)
Catalog Number: 94635 Enrollment: Limited to 15.
Eurydice Georganteli
Half course (fall term). Th., 2–4.
Money matters aims to engage first-year students with the economics, politics and aesthetics of one of the most fascinating and enduring aspects in human history. The seminar is a study of money in all its manifestations from the early agrarian societies to the first financial crisis of the 21st-century global market. How have individuals and societies reacted to and used money in business, politics, religion and art? Seminars will take place at the Harvard College, the Harvard Carpenter Center for the Visual Arts, the Harvard Art Museums and the Massachusetts Historical
Society offering students the opportunity to handle, research and discuss priceless artifacts.

*Freshman Seminar 37e. Extreme American Makeovers - (New Course)
Catalog Number: 64421 Enrollment: Limited to 15.
Wendy A. Lee
From Horatio Alger's fiction to TV's The Biggest Loser, literature and popular culture have represented the American Experience as one of miraculous transformation. By what agency, toward what end, and under what conditions do makeovers occur. Using fiction, TV shows, and advertisements, we’ll examine what makeovers and individual transformations are made of, how they work, how they change over time, and what they do for writers and readers. Texts by Horatio Alger, Jr., F. Scott Fitzgerald, Ralph Ellison, Malcolm X, Gish Jen. Films and TV shows might include Clueless and Queen for a Day.

*Freshman Seminar 37o. The Mad Subjects of Modernity - (New Course)
Catalog Number: 79528 Enrollment: Limited to 15.
Jennifer Spitzer
From Woolf’s Septimus Smith to Ellison’s Invisible Man, twentieth-century literature is dominated by representations of madness. These figures may be mad but they are also capable social commentators poised by virtue of their distance from centers of power and privilege to call attention to conditions of powerful powerlessness. In this course, madness will provide a prism through which to understand a nexus of intellectual and political concerns of the twentieth-century. The course will focus on literary and filmic representations of madness, while considering the harmony and dissonance between these representations and autobiographical accounts of mental illness.

*Freshman Seminar 37q. Great Jewish Books
Catalog Number: 31669 Enrollment: Limited to 15.
Shaye J.D. Cohen
Half course (fall term). W., 1–3.
This course is an entry into the world of Judaism, from antiquity to modern times, through reading and analyzing great Jewish books. These books address some of the large questions in the history of Judaism: what exactly is Judaism? What does it mean to be Jewish? How does Judaism compare with other religions? Authors and books include Josephus, the Mishnah, Judah HaLevi, Maimonides, the Zohar, Spinoza, Herzl, and Mordecai Kaplan.

*Freshman Seminar 37u. Bob Dylan
Catalog Number: 7520 Enrollment: Limited to 12.
Richard F. Thomas
Half course (fall term). W., 4–6.
Examines Dylan as a musical, literary, and general cultural phenomenon, in the context of
popular and higher literary culture of the last 50 years, but also in the context of those long-lived literary and musical cultures with which he works. Traces the evolution of his songs and lyrics from their early folk, blues, rock, gospel, and protest roots, through the transition from acoustic to electric, in studio and performative contexts, also through the many evolutions and reinventions that have characterized and continue to characterize his career in music, literature, and film.

Note: Open to Freshmen only.

*Freshman Seminar 37z. Socrates and His Critics*
Catalog Number: 1725 Enrollment: Limited to 12.
*Amelie Rorty and Russell Edward Jones*
Was Socrates guilty of treason and impiety? Did he corrupt the young of Athens? In this seminar, we will read a number of Plato’s "Socratic" dialogues (on friendship, sex, piety, imitation and censorship, courage, and justice), along with the work of authors whose views on these topics dramatically contrast with those of Socrates. The seminar will include Socratic discussions, with half the class taking the role of Socrates and half the role of his opponents; a visit to the Sackler Museum to compare Socrates’ and Oscar Wilde’s responses to art; and a dramatic re-enactment of the trial of Socrates.

Note: Open to Freshmen only.

*Freshman Seminar 38k. Cinema in Theory and Practice*
Catalog Number: 24813 Enrollment: Limited to 12.
*Dominique Bluher*
Half course (fall term). Tu., 1–4.
This seminar is intended for students who want to get a deeper understanding of cinema through theory and practice. The students will not only study movies and video installations, they will also be making five short movies in order to explore through practice fundamental cinematic elements such as framing, point of view, duration, camera movement, and relations of image, sound, and text.

Note: Open to Freshmen only.

*Freshman Seminar 38l. Introduction to Literary Theory and Cultural Studies, or How To Read Like a College Professor*
Catalog Number: 4870 Enrollment: Limited to 15.
*Joanna Nizynska*
Investigates major theoretical movements (e.g., structuralism, deconstruction, postcolonialism) in literary and cultural studies. Students gain a nuanced critical vocabulary, enhancing their ability to interpret aesthetic and social texts. Divided into three parts (mimesis, author, reader) and surveying texts from Plato to Henry Louis Gates, Jr., the course examines how meaning is generated and disseminated and how social structures, historical moments, and cultural beliefs contextualize acts of interpretation.

Note: Open to Freshmen only.
*Freshman Seminar 38n. Dead and Loving It?: The Cult of the Saints in the Late Antique and Medieval Eastern Mediterranean*

Catalog Number: 48826 Enrollment: Limited to 12.
Sarah Elizabeth Insley

This course will introduce students to literature, history, and religious life of the late ancient and medieval Mediterranean through the lens of a highly significant socio-cultural phenomenon: the Christian cult of the saints. Students will have the opportunity to engage with primary source texts in translation, while examining the subject from perspectives of anthropology, religious studies, material culture, history and literary studies, to approach this rich topic through an interdisciplinary framework. The course includes opportunities to engage with early Christian and medieval art and material culture, both in class and in trips to view objects in Harvard’s collections.

*Note:* Open to Freshmen only.

*Freshman Seminar 38s. Orphans, Foundlings, and the Family Romance - (New Course)*

Catalog Number: 60134 Enrollment: Limited to 15.
Christine S. Lee

More than any other literary hero, the orphan raises troubling questions about selfhood and society. Are we made in our parents’ image? Do we have a destiny bestowed upon us from birth? What makes us who we are--birth and bloodline, or education and experience? This course will follow the journeys of some of Western literature’s most famous foundlings from ancient Greece to modern England. Our readings will explore dramas, chivalric romances, picaresque adventures, novels, and fairy tales. Authors include Sophocles, Marie de France, Thomas Malory, William Shakespeare, Miguel de Cervantes, the Brothers Grimm, and Charles Dickens.

*Note:* Open to Freshmen only

*Freshman Seminar 38u. Sex and Decadence in Fin-de-Siècle Literature*

Catalog Number: 70134 Enrollment: Limited to 12.
Francois Proulx

Examines themes of decadence and transgression in works from the end of the last three centuries in France, Germany, Britain, and the United States. Questions include the history of sexuality and concepts of "deviance"; the aesthetics of shock and obscenity; and the roles of scandal. Readings by Laclos, Sade, Huysmans, Wilde, Wedekind, and others; opera and films by Strauss, Greenaway, Araki.

*Note:* Open to Freshmen only. All readings are in English. The seminar meets weekly for two hours, in addition to required visits to Houghton Library and the Harvard Art Museums. To view an online exhibition highlighting materials from the Harvard collections created by spring 2012 seminar students, please go to http://frsmr38u.tumblr.com/.

*Freshman Seminar 38v. Film Music and Film Sound*

Catalog Number: 6614 Enrollment: Limited to 12.
Carolyn Abbate
This seminar centers on classic film music written for movies from the late 1920s to the 1960s, and will discuss some of the very greatest soundtrack and musical scores that exist. We also deal with film sound in general: the technology that made silent movies "talk," the rules and tricks of sound and music production for film, and the scientific and aesthetic theories behind different approaches to the soundtrack.

*Note:* Open to Freshmen only.

*Prerequisite:* You do not need to read music for this seminar: film music is an aural art, and we refer only occasionally to musical notation.

*Freshman Seminar 38v. The Harvard Campus as a Microcosm of American Architecture - (New Course)*

Catalog Number: 92516 Enrollment: Limited to 15.

*Joseph Connors*

*Half course (fall term).* W., 3–5.

Harvard architecture as a mirror of institutional ideals and self-image from 1730-2012. Close inspection of individual buildings will be supplemented with material in the Harvard archives and with visits to contemporary buildings in Boston, as well as with readings in American history and literature.

*Note:* Open to Freshmen only.

*Freshman Seminar 39e. Rome and China - (New Course)*

Catalog Number: 19686 Enrollment: Limited to 15.

*Emma Dench and Michael J. Puett*

*Half course (spring term).* Tu., 2–4.

The Roman Empire (at its peak c. 200 BCE-c. 200 CE) and the Han Empire (202 BCE-220 CE) were exact contemporaries but only dimly aware of one another, and actual contact between the two imperial powers was limited to small-scale trading of a few luxury commodities, especially silk and glass. The comparison of the two, with emphasis on the ways in which their own respective inhabitants viewed and experienced imperial power as reflected in texts and archaeological evidence, will help us to appreciate the rich and fundamental differences between two modes of rule that we label 'empires'.

*Note:* Open to Freshmen only.


Catalog Number: 23719 Enrollment: Limited to 15.

*Theodore E. Stebbins*

*Half course (spring term).* Tu., 3–5:30.

The aim of this course is to present a broad survey of a dozen important moments over three centuries of American art, through lens of a particular city, Boston. It will emphasize the close examination of paintings, artifacts, and buildings in the Cambridge/Boston area, and will make use of a variety of methodologies. We will be asking about patterns of production, patronage of cultural artifacts, how objects can be read in terms of the changing cultures that produced them, and how taste changes from one generation to the next. We will also consider the increasingly important roles of museums.

*Note:* Open to Freshmen only.
*Freshman Seminar 40i. The Supreme Court in U.S. History  
Catalog Number: 7142 Enrollment: Limited to 15.  
Richard H. Fallon (Harvard Law School)  
Often described as the world’s most powerful court, the US Supreme Court has not always enjoyed high prestige or unquestioned authority. The Court’s significance has waxed and occasionally waned, with the variations typically depending on surrounding currents in the nation’s social and political history. Examines the history of the Court from the nation’s founding to the present. Highlights relation between constitutional law and ordinary politics, and the ways in which they influence one another.  
*Note: Open to Freshmen only.

*Freshman Seminar 40k. Health Care on Less Than 8,000 Dollars a Year - (New Course)  
Catalog Number: 28545 Enrollment: Limited to 15.  
Alan M. Garber  
Half course (spring term). W., 3–5.  
Health care in the United States is often criticized for its expense, ineffectiveness, and inequity. Every policy solution for increasing access to care faces the challenge of dealing with its costs. Because per capita annual health expenditures exceed 8,000 dollars, the subsidies needed to support health insurance expansions are large and controversial. The fundamental challenge to improving health and health care is to rationalize expenditures by improving the efficiency or productivity of care. This seminar explores barriers to health care productivity in the U.S, along with potential approaches to enhance the value of care.  
*Note: For Freshmen only.

*Freshman Seminar 40s. From September 11th to the War on Terror: Terrorism and counterterrorism in sociological perspective - (New Course)  
Catalog Number: 85729 Enrollment: Limited to 15.  
Lisa Stampnitzky  
Half course (fall term). W., 2–5.  
We often hear that, "On 9/11, everything changed." But is this oft-repeated statement true? What has changed, and why, as a result of 9/11, and how have these changes shaped society in the decade since the attacks? In this class, we will consider questions such as the following: what is "terrorism", where did the problem of "terrorism", and the ways in which we think about it, come from, what might be alternate ways of understanding political violence, how do social scientists think about terrorism and why did the ‘war on terror’ take shape as it did?  
*Note: Open to Freshmen only.

Catalog Number: 2004 Enrollment: Limited to 15.  
Maxine Isaacs  
Half course (fall term). Tu., 1–3.  
What can we learn about the presidential election of 2012 and our own political era from elections since 1960? In this Seminar, we examine changes and continuities in campaigns and elections since 1960; demographic and opinion shifts over the last fifty years; the nature and structure of American public opinion; and ways American news media transmit information and
people learn about matters in the public sphere. We will use these different perspectives to understand the 2012 election and our own times, issues and society.

*Freshman Seminar 41u. Museums - *(New Course)*

Catalog Number: 57831 Enrollment: Limited to 12.

James Hanken


What are museums? What exactly do they do, and why? Do they have a future? Traces the history of museums from their beginnings centuries ago to the modern institutions of today. Considers objects and their conservation, the role of museums in contemporary society, finances, dual—and sometimes conflicting—functions of scholarly research and public display, exhibit design, legal and ethical issues, and other challenges. Sessions include field trips to museums at Harvard and elsewhere in the Boston area to view public exhibits and "behind-the-scenes" collections that the public rarely sees.

*Note:* Open to Freshmen only.

*Freshman Seminar 41w. Teenage Wasteland? Youth from James Dean to Katniss Everdeen - *(New Course)*

Catalog Number: 34207 Enrollment: Limited to 15.

Caitlin M. Casey

Half course (spring term). W., 3–5.

This interdisciplinary course explores both the idea of the teenager in American politics and culture and the experiences of actual young people during the postwar era. We will examine why young people have been such a problematic group for adults in society and how they have crafted their own communities and modes of self-expression outside of the mainstream. Exploring ideas of rebellion, politics, race, gender and class through the lens of youth will give us a new perspective to interrogate moments of upheaval in US history.

*Note:* Open to Freshmen only.

*Freshman Seminar 42k. Comparative Law and Religion*

Catalog Number: 9992 Enrollment: Limited to 12.

Ofrit Liviatan

Half course (spring term). Th., 1–3.

Investigates the use of legal processes in addressing religion-based conflicts, a leading source of tension in modern societies. The seminar will explore theoretical approaches to accommodating religious diversity and examine existing models of religion-state relationships. Drawing on legal cases from the US, Turkey, India, Israel, Spain, Canada, and England, the seminar will also familiarize participants with contemporary debates involving religion: the wearing of Islamic headscarf, religion and education, the funding of religious institutions, etc.

*Note:* Open to Freshmen only.

*Freshman Seminar 42n. Comparative National Security of Middle Eastern Countries*

Catalog Number: 5714 Enrollment: Limited to 15.

Charles David Freilich

The course surveys the national security threats and opportunities facing the primary countries of the Middle East, from their perspective. Issues discussed include the domestic sources of national security considerations, including regime change, relations with regional and international players, military doctrine, foreign policy principles. The seminar is an interactive, "real world" exercise, in which students play the role of leaders in the countries of their choosing and write practical policy recommendations on current affairs.

*Note: Open to Freshmen only.*

**Freshman Seminar 42q. Modernity, Globalization and Cultural Identity in Latin America**
Catalog Number: 4079 Enrollment: Limited to 15.
*Mariano Siskind*
_Half course (fall term). M., 3–5._
Throughout the twentieth century, Latin American artists and intellectuals have been defined by their desire to be modern. We will interrogate novels, films, paintings and cultural practices that pose, explicitly or implicitly, the question of identity in Latin America, in the context of the long history of the globalization of modernity. Essays and novels by Borges, Octavio Paz, Oswald de Andrade and Roberto Bolaño; films like "Duck Season" (Fernando Eimbecke, Mexico, 2003) and "Fotografías" (Andrés Di Tella, Argentina, 2007); and cultural forms such as tango, bossa nova and soccer understood as relevant cultural languages of the region.

*Note: Open to Freshmen only. The course will be taught in English.*

**Freshman Seminar 42u. The Laws of War and the War on Terrorism**
Catalog Number: 9694 Enrollment: Limited to 12.
*Gregg Andrew Peeples*
_Half course (fall term). W., 3–5._
How do the "laws of war" regulate the conduct of the United States in the "Global War on Terrorism?" This seminar examines the historical development of two legal concepts: jus ad bellum, which determines the legitimacy of the use of armed force; and jus in bello, which defines the duties of soldiers and belligerent states. Drawing on this background, the seminar explores how these laws have influenced U.S. military and anti-terrorism operations since 9/11.

*Note: Open to Freshmen only.*

**Freshman Seminar 42v. Human Rights Between Rhetoric and Reality**
Catalog Number: 1757 Enrollment: Limited to 15.
*Stephen P. Marks (Public Health)*
_Half course (fall term). M., 4–6._
Examines radically different perspectives on the question of whether human rights discourse is merely rhetorical or captures a significant dimension of reality for peoples in diverse cultures. Topics include compatibility of human rights with contending philosophical systems and religions, feminism, and post-modern critical theory; challenges to human rights from various scientific perspectives, including evolutionary biology, genetic engineering, and brain research; and the relative significance of human rights in law and government, economics, and foreign policy.

*Note: Open to Freshmen only.*
*Freshman Seminar 43l. Happiness in Philosophy and Psychoanalysis*
Catalog Number: 15185 Enrollment: Limited to 15.
*Lucas S. Fain*
*Half course (fall term). M., 3–5.*
Everyone wants to be happy. But do we even know what we want when we say that we desire happiness? Few questions generate so much existential anxiety and overwhelming philosophical interest. For without knowledge of happiness, how can we know what it means to live a good life? This course examines these questions as they have been considered variously in philosophy and psychoanalysis. Readings include works by Aristotle, Descartes, Rousseau, Kant, Nietzsche, Freud, and Castoriadis.
*Note:* Open to Freshmen only.

*Freshman Seminar 43m. Psychology of Religion*
Catalog Number: 83191 Enrollment: Limited to 15.
*Jon Wesley Boyd*
*Half course (fall term). M., 3:30–5:30.*
This course addresses some of the fundamental issues of the nature of the self, issues which appear at the intersection of religion and psychology. The course will focus on issues of narrative as well as "world construction," the ways in which both individuals and cultures create frameworks of meaning. The readings explore philosophical, psychological, and literary perspectives on religious experience and include works by William James, Freud, Jung, Dostoevsky, Flannery O’Connor, Malcolm X and others.
*Note:* Open to Freshmen only.

*Freshman Seminar 43w. History, Nationalism, and the World: the Case of Korea*
Catalog Number: 4281 Enrollment: Limited to 12.
*Sun Joo Kim*
*Half course (fall term). M., 3–6.*
The colonialism and postcolonial division of Korea into North and South thrust the memory of past events into current political discussions as well as scholarly debates. This seminar investigates selected events in Korean history to map the interaction between historical writing and politics and to address questions such as why historians have emphasized certain periods and aspects of Korean history while ignoring others.
*Note:* Open to Freshmen only. All reading will be in English.

*Freshman Seminar 43y. Where Does Your Morality Come From?*
Catalog Number: 9380 Enrollment: Limited to 15.
*Alan Dershowitz (Law School)*
*Half course (fall term). Tu., 4–6.*
What are the sources of morality, law and rights? This seminar explores these sources through a variety of readings: The Brothers Karamazov, excerpts from the Old and New Testaments and the Koran as well as from my book, The Genesis of Justice), psychology (Steven Pinker, Marc Hauser), philosophy (Robert Nozick, Socrates, Cicero), jurisprudence (my book, Rights From Wrongs, Ronald Dworkin) and positive law (the Declaration of Independence, the Constitution, and foundational documents from other countries).
*Note:* Open to Freshmen only.
**Freshman Seminar 43z. Cyberspace in Court: Law of the Internet**
Catalog Number: 2880 Enrollment: Limited to 15.
Phillip Robert Malone
How collisions of interests in online space play out in lawsuits or in proposals before legislatures -- controversies involving Google, YouTube, Apple, Microsoft, MySpace. Examines broad questions of social and technology policy through the lens of law and specific lawsuits. Topics: copyright and fair use, peer-to-peer file sharing, digital rights management, and the DMCA; online speech, anonymity, and privacy; citizen journalism and new media; competition and antitrust; pornography, child protection, and online gambling; security, phishing, and spyware.
Note: Open to Freshmen only.

**Freshman Seminar 44g. Public Policy Approaches to Global Climate Change**
Catalog Number: 1032 Enrollment: Limited to 14.
Richard N. Cooper
Reviews what is known about greenhouse gas emissions’ possible impact on climate. Explores possible impact of climate change on social and economic conditions over the next century. Investigates possible public policy responses to these developments, including actions both to adapt to and to mitigate climate change. What would be the costs of adaptation? Would an investment in mitigating the changes be worthwhile? Are there possibilities for international cooperation in dealing with the problem?
Note: Open to Freshmen only.

**Freshman Seminar 44j. The Aztecs and Maya: 2012 and Beyond**
Catalog Number: 7826 Enrollment: Limited to 15.
Jennifer Lynn Carballo
Explores Aztec and Maya culture, history, religion from insider and outsider (Spanish) perspectives. Analyzes how religion fueled genesis and expansion of Aztec empire as well as the Conquistadors’ activities. Examines approaches used to piece back together puzzles of how a magnificent cultural tradition, the Maya, took root and thrived in tropical forest setting. Examines how modern scholars and students explore world-view, social relations, and history of other cultures including Maya and Aztec peoples today.
Note: Open to Freshmen only.

**Freshman Seminar 44s. Neanderthals and Human Evolutionary Theory**
Catalog Number: 46776 Enrollment: Limited to 12.
Tanya M. Smith
This course explores the origins and development of human evolutionary theory in parallel with the discovery and study of our "cousins," the Neanderthals. Readings and discussions highlight breakthroughs in evolutionary theory since the 17th century, ranging from the Darwinian revolution to the field of "evo-devo." The recent history of the Neanderthals is explored in detail, which mirrors intellectual developments in biological anthropology ranging from the re-
conceptualization of race to innovations in recovering ancient DNA.  
Note: Open to Freshmen only.

*Freshman Seminar 44t, The Atomic Bomb in History and Culture  
Catalog Number: 2897 Enrollment: Limited to 15.  
Everett I. Mendelsohn  
The explosion of the atomic bomb over the Japanese city of Hiroshima in 1945 ushered in a new era of warfare, of scientific prominence, of civic anxiety, and political challenge. Explores the interaction of science, politics, strategy, and culture in the studies of historians as well as in the literature, films, and theater from the early years of the twentieth century through the 1970s and 1980s dealing with the atom and the atom bomb.  
Note: Open to Freshmen only.

*Freshman Seminar 45u, Suicide and Violence: a Public Health Perspective  
Catalog Number: 47928 Enrollment: Limited to 12.  
Matthew J. Miller (Public Health)  
Approximately one million people die by suicide each year - or one death every 40 seconds. Another million die by violence directed at others: 600,000 by homicide and 400,000 in armed conflicts. In the United States too, annual suicide deaths outnumber homicide deaths, but both take a large and disproportionate toll on young people. This course provides an introduction to the scientific study of suicide and violence in the United States and abroad from a public health perspective.  
Note: Open to Freshmen only.

*Freshman Seminar 45z, Imagining the American Suburb Post-World War II  
Catalog Number: 71941 Enrollment: Limited to 15.  
Paige L. Meltzer  
This course considers the powerful fantasies of "the suburbs" since World War II, how these fantasies have changed over time, and what these fantasies and changes tell us about American culture, politics, and identity. We will examine "Suburbia’s" association with the ephemeral American Dream, conformity, hetero-normative gender performance, teen rebellion, racial tension, sprawl, and urban decay. Texts include histories, novels, films, television, and graphic novels. There will be 3 out-of class film viewings.  
Note: Open to Freshmen only.

*Freshman Seminar 46e, The Germans and Their History  
Catalog Number: 7802 Enrollment: Limited to 12.  
Steven Ozment  
Half course (fall term). W., 3–5.  
Can earlier centuries shed light on the present ones? The seminar will reach back to the first century C.E. and forward to the twenty-first century in search of continuities and discontinuities in the political and cultural life of Germans. The goal will be to discover defining experiences in German history and memory and to ask what they promise, or portend, for a united and
democratic Germany facing new demographic, economic, and geo-political crises.

Note: Open to Freshmen only.

*Freshman Seminar 46j. Freedom of Expression: Is It the Primary Right? The Divide Between Europe and the United States
Catalog Number: 43846 Enrollment: Limited to 15.
Ioanna Tourkochoriti
Why must speech be free? Must speech enjoy a special protection compared to other freedoms? The course will discuss the divide between Europe and United States on the protection of freedom of expression. It will study case law of the Supreme Court of the USA and of the European Court of Human rights and other European institutions. Cases studies will include hate speech, pornography, the Islamic scarf ban in France, the Danish cartoons and reality shows. Note: Open to Freshmen only.

*Freshman Seminar 46t. Rebels With a Cause: Tiananmen in History and Memory
Catalog Number: 54666 Enrollment: Limited to 15.
Rowena Xiaoqing He
In spring 1989, millions of Chinese took to the streets calling for political reforms. The nationwide demonstrations and the college students’ hunger strike on Tiananmen Square ended with the People’s Liberation Army firing on unarmed civilians. Student leaders and intellectuals were purged, imprisoned, or exiled. ?Tiananmen? remains a political taboo in China today despite the Tiananmen Mothers’ struggle to keep the forbidden memory alive. This course will explore the Tiananmen Movement in history and memory.

Note: Open to Freshmen only.

*Freshman Seminar 46w. Leadership and Negotiation
Catalog Number: 89323 Enrollment: Limited to 12.
Kimberlyn Rachael Leary (Medical School)
Half course (fall term). M., 4–6.
The critical problems threatening community safety and wellbeing, terrorism, climate change or access to health care, frequently look different to the diverse stakeholders who are party to them. Legislators, business owners, and disenfranchised group members don’t always see the same things even when brought together to address the common problem they share. This course will explore how leaders negotiate these challenges so that their communities can make real progress.

Note: Open to Freshmen only.

*Freshman Seminar 47g. Science Fiction or The Way We Live Now
Catalog Number: 39256 Enrollment: Limited to 15.
Patrick John Pritchett
This course will examine some of the anxieties and hopes clustered around the emerging idea of the posthuman as its been played out in contemporary novels and films, in conjunction with a number of significant philosophical and scientific essays that attempt to frame the posthuman. Central to our investigation will be the idea of technological modernity as both utopian promise
and apocalyptic threat.
Note: Open to Freshmen only.

**Freshman Seminar 47p. Just Friends: I Don’t Love You Like That**
Catalog Number: 87048 Enrollment: Limited to 15.
Bonnie M. Talbert
*Half course (fall term). W., 3–5.*
Tell someone that you just want to be friends and it will be taken as an assertion that you are slotting them into a secondary role—they are not seen as suitable for the highest levels of affection, i.e., romantic love. But friendship has not always been seen as a lesser relation of romance. This raises some important questions about the nature of friendship, and this course will examine these and other related topics.
Note: Open to Freshmen only.

**Freshman Seminar 47w. Fantastic Cities: Urban Landscapes as Filtered through Memory, Imagination, and Dreams**
Catalog Number: 17948 Enrollment: Limited to 12.
Christina Lynne Svendsen
*Half course (fall term). Tu., 3–5.*
"Fantastic Cities" is an interdisciplinary seminar mapping the different ways that people have imagined cities via artistic media, creating urban imaginaries of the past, of unfamiliar presents, and of the (near) future. We will investigate versions of Rome, Berlin, London, New York, Lagos, and fantastical counter-factual cities as presented in novels, art, film, philosophy, history, and autobiography. Students will develop their skills in textual analysis, visual analysis, critical thinking, and ways of integrating the three, in order to learn how to pursue comparative projects in the humanities.
Note: Open to Freshmen only.

**Freshman Seminar 48e. Gender, Health, and Mental Health**
Catalog Number: 96979 Enrollment: Limited to 15.
Mary Ruggie (Kennedy School)
*Half course (spring term). M., 2–4.*
This course adopts interdisciplinary perspectives toward understanding how gender differences and similarities in health and mental health are manifest, if and how common patterns are changing, and what circumstances and context impact outcomes. We also examine differences within genders based on race/ethnicity and other personal and social characteristics. Topics include depression, substance abuse, eating disorders, sexual activity and gender-based violence. Throughout, we traverse the boundary between health and illness in order to explore the role of individuals, their social support networks, and health care professionals in developing and guiding strategies for coping and healing.
Note: Open to Freshmen only.

**Freshman Seminar 48g. Fascism From Mussolini to Today**
Catalog Number: 17157 Enrollment: Limited to 15.
Brendan Jeffrey Karch
*Half course (fall term). W., 2–4.*
What is fascism, what did look like in practice, and does it still exist today? This seminar explores fascism from its origins in the early twentieth century through its present-day deployment in politics and popular culture. The political, racial, and gender policies of fascism in Nazi Germany and Fascist Italy are compared to postwar movements and to the proliferating uses of fascist vocabulary today. Readings and assignments facilitate the interdisciplinary study of history.

*Note:* Open to Freshmen only

**Freshman Seminar 48j. Moral and Political issues in Contemporary Democracies**  
Catalog Number: 95954 Enrollment: Limited to 15.  
Carla Yumatle  
*Half course (spring term). W., 2–4.*  
The course addresses timely *problems* and core *values* of contemporary democracies. The *problems* that we will examine include: torture, terrorism, immigration, affirmative action, and hate speech. Each of these topics poses a challenge to key *values* characteristic of liberal-democracies such as the rule of law, toleration, political equality, and freedom. We will examine the philosophical justification of these values as a background to the discussion of the applied cases mentioned above.

*Note:* Open to Freshmen only.

**Freshman Seminar 48k. Political Legitimacy and Resistance: What Happened in Montaigne's Library on the Night of October 23, 1587, and Why Should Political Philosophers Care?**  
Catalog Number: 4798 Enrollment: Limited to 12.  
Arthur I. Applbaum (Kennedy School)  
*Half course (fall term). W., 4–6.*  
Explores the theories of political legitimacy and justified resistance to authority developed by the persecuted Protestants during the French Wars of Religion, and traces the influence of these ideas about political obligation and religious conscience on some of the major figures in modern political philosophy from Hobbes to Kant. Students should be prepared to engage in both historical detective work and philosophical reflection. All required reading will be in English.

*Note:* Open to Freshmen only.

**Freshman Seminar 48s. Schools, Selves, and Society**  
Catalog Number: 27518 Enrollment: Limited to 12.  
Chiwen Bao  
*Half course (spring term). Th., 4–6.*  
How do we understand current educational problems and imagine supporting what is good for individuals and society? Engaging with current debates on education in the U.S and also going beyond those debates, we endeavor to understand how educational policies, practices and processes cultivate different experiences of individual selves and shape society, including educational outcomes, in particular ways. With a focus on secondary school and the experiences of students and teachers, we examine the history of education in the U.S. and current academic, social and cultural practices to advance our understanding the challenges and possibilities facing our educational system.

*Note:* Open to Freshmen only.
*Freshman Seminar 49n. Measurements of the Mind: The Creation and Critique of the Psychological Test
Catalog Number: 9965 Enrollment: Limited to 12.
Marla D. Eby (Medical School)
Half course (fall term). W., 3–5.
Introduces the history of psychological tests, from the perspective of the psychologists using them, the people tested, and the general public. Examines the creativity within psychology in the making of such tests, as well as the drawbacks and dangers of the (mis)uses of these instruments. Explores tests in current use, as well as tests contained in various Harvard archives. Final project for this seminar involves the design of an original psychological test.
Note: Open to Freshmen only.

*Freshman Seminar 49p. What If? Alice in Wonderland, Peter Pan, and the Literary Culture of Childhood
Catalog Number: 4622 Enrollment: Limited to 12.
Maria Tatar
Graham Greene once observed that nothing we read as adults can equal the "excitement and revelation" of the "first fourteen years". This seminar will explore the aesthetics and ethics of narratives written for children, with a focus on Lewis Carroll’s Alice in Wonderland and J.M. Barrie’s Peter Pan. We will branch out into other possible worlds constructed by authors of children’s books.
Note: Open to Freshmen only.

House Seminars
House Seminars are limited enrollment courses sponsored by the individual residential Houses. They are open to undergraduates only, whether freshmen or upperclassmen, across all house affiliations. They are letter-graded degree-credit courses that may be taken Pass/Fail. Enrollment requires the permission of the instructor.

Primarily for Undergraduates
Leverett
Lowell
Mather
Pforzheimer
Winthrop

Winthrop 75. The Laws of War
Catalog Number: 7271 Enrollment: Limited to 15.
Gregg Andrew Peeples
Half course (spring term). W., 3–5.
What are the "laws of war"? This seminar examines the historical development of two legal concepts: jus ad bellum, which judges the legitimacy of the use force in international relations; and jus in bello, which defines the duties of belligerents during an armed conflict. Drawing on this background in international and U.S. law, the seminar then explores how these laws have influenced the U.S. "War on Terror" and how they might shape future conflicts.
Note: Open to students from all Houses.

African and African American Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of African and African American Studies

Evelyn Brooks Higginbotham, Victor S. Thomas Professor of History and of African and African American Studies (Chair)
Emmanuel K. Akyeampong, Professor of History and of African and African American Studies
Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures
Robert H. Bates, Eaton Professor of the Science of Government and Professor of African and African American Studies (on leave 2012-13)
Robin M. Bernstein, Associate Professor of African and African American Studies and of Studies of Women, Gender, and Sexuality
Homi K. Bhabha, Anne F. Rothenberg Professor of the Humanities
Suzanne P. Blier, Allen Whitehill Clowes Professor of Fine Arts and Professor of African and African American Studies
Lawrence D. Bobo, W. E. B. Du Bois Professor of the Social Sciences
Vincent Brown, Charles Warren Professor of American History and Professor of African and African American Studies
Glenda R. Carpio, Professor of English and of African and African American Studies
Jean Comaroff, Alfred North Whitehead Professor of African and African American Studies and of Anthropology
John Comaroff, Hugh K. Foster Professor of African and African American Studies and of Anthropology
Boubacar Diakite, Preceptor in African and African American Studies
Caroline M. Elkins, Professor of History (on leave 2012-13)
Marla F. Frederick, Professor of African and African American Studies and of Religion (on leave 2012-13)
Henry Louis Gates, Jr., Alphonse Fletcher, Jr. University Professor
Claudine Gay, Professor of Government and of African and African American Studies
Evelynn M. Hammonds, Barbara Gutmann Rosenkrantz Professor of the History of Science and of African and African American Studies, Dean of Harvard College
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Kellie C. Jackson, College Fellow on African and African American Studies
Biodun Jeyifo, Professor of African and African American Studies and of Comparative Literature (on leave spring term)
Walter Johnson, Winthrop Professor of History and Professor of African and African American Studies
Michael R. Kremer, Gates Professor of Developing Societies
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Joanna Lipper, Lecturer on African and African American Studies
Carla Denny Martin, College Fellow on African and African American Studies
Ingrid Monson, Quincy Jones Professor of African-American Music, Supported by the Time Warner Endowment (on leave 2012-13)
Marcyliena Morgan, Professor of African and African American Studies
John M. Mugane, Professor of the Practice of African Languages and Cultures and Director of the African Language Program
Jacob Olupona, Professor of African and African American Studies and Professor of African Religious Traditions (Director of Graduate Studies)
Laurence A. Ralph, Assistant Professor of African and African American Studies and Anthropology (on leave 2012-13)
Tommie Shelby, Professor of African and African American Studies and of Philosophy (Director of Undergraduate Studies)
Kay Kaufman Shelemay, G. Gordon Watts Professor of Music and Professor of African and African American Studies
James Sidanius, Professor of Psychology and of African and African American Studies
Werner Sollors, Henry B. and Anne M. Cabot Professor of English Literature and Professor of African and African American Studies (on leave spring term)
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of African and African American Studies
John Stauffer, Professor of English and of African and African American Studies
David Williams, Florence Sprague Norman and Laura Smart Norman Professor of Public Health in the School of Public Health and Professor of African and African American Studies in the Faculty of Arts and Sciences
William Julius Wilson, Lewis P. and Linda L. Geyser University Professor

Other Faculty Offering Instruction in African and African American Studies

Aisha Mahina Beliso-De Jesus, Assistant Professor of African American Religions (Divinity School)
David Bindman, Visiting Professor of History of Art and Architecture
Orlando Patterson, John Cowles Professor of Sociology
Mark R. Warren, Associate Professor of Education (Education School)
Primarily for Undergraduates

**African and African American Studies 10. Introduction to African American Studies**
Catalog Number: 0802  
*Henry Louis Gates, Jr. and Lawrence D. Bobo*  
*Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4*
An exploration of some of the key texts and issues in African American Studies from a range of disciplinary perspectives. Members of the faculty deliver guest lectures in their own areas of specialization.
*Note:* Required of concentrators in the African American Studies track. Students who transfer into the concentration after their sophomore year may substitute another African and African American Studies course already taken if they satisfy the Director of Undergraduate Studies that it establishes a basic familiarity with the materials covered in African and African American Studies 10. This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**African and African American Studies 11. Introduction to African Studies**
Catalog Number: 9428  
*Jacob Olupona*  
*Half course (fall term). Th., 10–12. EXAM GROUP: 12, 13*
This course introduces students to the general outlines of African archeology, history and geography, as well as key concepts in the study of African health, social life, economic situation, arts, and politics. Our aim is to give students a fundamental vocabulary and interdisciplinary methodology for the study of Africa. Throughout, we assume that Africa is not a unique isolate but a continent bubbling with internal diversity, historical change, and cultural connections beyond its shores. The course is open to all students who are interested in exploring various dimensions of African life and cultures in ancient and modern periods.
*Note:* Required of concentrators in African Studies track. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

**African and African American Studies 20. Introduction to African Languages and Cultures**
Catalog Number: 2048  
*John M. Mugane*  
*Half course (fall term). M., W., at 12; . EXAM GROUP: 5*
This introduction to African languages and cultures explores how sub-Saharan Africans use language to understand, organize, and transmit (culture, history, etc.) indigenous knowledge to successive generations. Language serves as a road map to comprehending how social, political, and economic institutions and processes develop: from kinship structures and the evolution of political offices to trade relations and the transfer of environmental knowledge. As a Social Engagement course, AAAS 20 will wed scholarly inquiry and academic study to practical experience and personal involvement in the community. Students will be given the opportunity to study Africans, their languages, and their cultures from the ground up, not only through textbooks and data sets but through personal relationships, cultural participation, and inquisitive
explorations of local African heritage communities. Throughout the semester you will be asked to employ video production, ethnographic research, creative writing, "social-portraiture," GIS mapping, and linguistic study as you engage with Africans, their languages, and their cultures. By examining linguistic debates and cultural traditions and interrogating their import in the daily lives of Boston-area Africans, we hope to bridge the divide between grand theories and everyday practices, between intellectual debates and the lived experiences of individuals, between the American academy and the African world. Ultimately, this course aims to place Africans themselves in the center of the academic study of Africa.

Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Foreign Cultures.

African Languages

Language classes are open to undergraduates, graduate students, and cross-registration applicants. For instruction in languages that are not listed, please consult the Director of the African Language Program. Not open to auditors.

Undergraduate Language Tutorials

African and African American Studies 90r, African Language Tutorials
Catalog Number: 7010
John M. Mugane
Half course (fall term; repeated spring term). Hours to be arranged.
Individualized study of an African language at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy. Any language not listed as a course is taught under this number.

Note: For instruction in languages that are not listed, please consult the Director of the African Language Program. Not open to auditors.

Afrikaans

African and African American Studies 90r.a1. Afrikaans - (New Course)
Catalog Number: 97322
John M. Mugane
Half course (fall term; repeated spring term). Spring: Tu., at 10; Tu., at 11; Tu., at 12; M., 4–5:30.
Individualized study of Afrikaans at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Amharic

African and African American Studies 90r.a. Amharic
Catalog Number: 44149
John M. Mugane

*Half course (fall term; repeated spring term). Hours to be arranged.*

Individualized study of Amharic at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.

Not open to auditors.

**Bamanakan**

[African and African American Studies 90r.b. Bamanakan](#)

Catalog Number: 59256

John M. Mugane

*Half course (fall term; repeated spring term). Fall: Tu., at 12; Tu., at 1; Th., at 9; Th., at 10.*

Individualized study of Bamanakan at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.

Not open to auditors.

**Cape Verdean Creole**

[African and African American Studies 90r.c. Cape Verdean Creole](#)

Catalog Number: 74363

John M. Mugane

*Half course (fall term; repeated spring term). Hours to be arranged.*

Individualized study of Cape Verdean Creole at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.

Not open to auditors.

**Chichewa**

[African and African American Studies 90r.d. Chichewa](#)

Catalog Number: 22841

John M. Mugane

*Half course (fall term; repeated spring term). M., W., at 11; M., W., at 12.*

Individualized study of Chichewa at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.

Not open to auditors.

**Dinka**
African and African American Studies 90r.e. Dinka
Catalog Number: 37948
John M. Mugane

Half course (fall term; repeated spring term). Hours to be arranged.
Individualized study of Dinka at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.

Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Egyptian Hieroglyphs

Gikuyu

Gikuyu A. Elementary Gikuyu
Catalog Number: 0009
John M. Mugane

Full course (indivisible). Hours to be arranged.
Gikuyu is a Bantu language spoken by Kenya’s most populous ethnic group. The Gikuyu are among Africa’s most recognized peoples because of the Mau Mau freedom fighters who were mainly Gikuyu.

Note: The course is designed primarily for students who have no prior knowledge of Gikuyu; however, students with minimal knowledge of the language may also register for the course. Not open to auditors.

Gikuyu B. Intermediate Gikuyu
Catalog Number: 0010
John M. Mugane and assistant

Full course (indivisible). Hours to be arranged.
Continuation of Gikuyu A. Gikuyu is a Bantu language spoken by Kenya’s most populous ethnic group. The Gikuyu are among Africa’s most recognized peoples because of the Mau Mau freedom fighters who were mainly Gikuyu.

Note: Not open to auditors.

Prerequisite: Gikuyu A or the equivalent of one year’s study in Gikuyu.

Gikuyu 101ar. Reading in Gikuyu
Catalog Number: 0017
John M. Mugane and assistant

Half course (fall term). Hours to be arranged.
Advanced reading in Gikuyu.

Note: Not open to auditors.

Prerequisite: Gikuyu B or equivalent.

Gikuyu 101br. Reading in Gikuyu II
Catalog Number: 0018
John M. Mugane and assistant
**Half course (spring term). Hours to be arranged.**
Advanced reading in Gikuyu II.
*Note:* Not open to auditors.
*Prerequisite:* Gikuyu 101ar or equivalent.

**Haitian Creole**

**African and African American Studies 90r.g. Haitian Creole**
Catalog Number: 68162
John M. Mugane
*Half course (fall term; repeated spring term). Hours to be Arranged.*
Individualized study of Haitian Creole at the elementary, intermediate, and advanced levels.
Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.
Not open to auditors.

**Hausa**

**African and African American Studies 90r.h. Hausa**
Catalog Number: 83269
John M. Mugane
*Half course (fall term; repeated spring term). Hours to be arranged.*
Individualized study of Hausa at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.
Not open to auditors.

**Ibibio**

**African and African American Studies 90r.w. Ibibio**
Catalog Number: 42039
John M. Mugane
*Half course (fall term; repeated spring term). Fall: M., W., 4–6; Spring: Tu. through Th., at 4:30; W., 4:30–6:30, M., at 5.*
Individualized study of Ibibio at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information.
Not open to auditors.

**Igbo**

**African and African American Studies 90r.i. Igbo**
Catalog Number: 31747
John M. Mugane  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Individualized study of Igbo at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Kikongo**

**African and African American Studies 90r.v. Kikongo**  
Catalog Number: 52859  
John M. Mugane  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Individualized study of Kikongo at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Kinyarwanda**

**African and African American Studies 90r.j. Kinyarwanda**  
Catalog Number: 98376  
John M. Mugane  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Individualized study of Kinyarwanda at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Krio**

**African and African American Studies 90r.s. Krio**  
Catalog Number: 74597  
John M. Mugane  
*Half course (fall term; repeated spring term). Spring: M., 2:30–4:30.*  
Individualized study of Krio at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Lingala**
African and African American Studies 90r.z. Lingala - (New Course)
Catalog Number: 85266
John M. Mugane
Half course (fall term; repeated spring term). Hours to be arranged.
Individualized study of Lingala at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of the Language Programs for more information. Not open to auditors.

Luganda

African and African American Studies 90r.k. Luganda
Catalog Number: 46854
John M. Mugane
Half course (fall term; repeated spring term). Fall: W., 3–6.
Individualized study of Luganda at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Oromo

African and African American Studies 90r.l. Oromo
Catalog Number: 61961
John M. Mugane
Half course (fall term; repeated spring term). Hours to be arranged.
Individualized study of Oromo at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Pulaar

African and African American Studies 90r.v. Pulaar
Catalog Number: 40174
John M. Mugane
Half course (spring term). Hours to be Arranged.
Individualized study of Pulaar at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of the Language Programs for more information. Not open to auditors.
Setswana

**African and African American Studies 90r.x. Setswana**

Catalog Number: 81159  
John M. Mugane  
*Half course (fall term; repeated spring term). Spring: M., at 8:30, F., at 9, W., at 2. EXAM GROUP: Spring: 1, 2, 7*

Individualized study of Setswana at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Shona

**African and African American Studies 90r.t. Shona**

Catalog Number: 27694  
John M. Mugane  
*Half course (fall term; repeated spring term). Hours to be arranged.*

Individualized study of Shona at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Somali

**African and African American Studies 90r.m. Somali**

Catalog Number: 10439  
John M. Mugane  
*Half course (fall term; repeated spring term). Hours to be arranged.*

Individualized study of Somali at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Sudanese Arabic

**African and African American Studies 90r.u. Sudanese Arabic**

Catalog Number: 46375  
John M. Mugane  
*Half course (fall term; repeated spring term). Fall: W., at 6; W., at 1; Th., 6–8 p.m.; Spring: Tu., 5–9 p.m.; W., 5–9 p.m.*

Individualized study of Sudanese Arabic at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on
the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Swahili**

**Swahili A (formerly African and African American Studies 121). Elementary Swahili**
Catalog Number: 1878
John M. Mugane
Full course (indivisible). Fall: M., W., F., at 10; Spring: M., W., F., at 10. EXAM GROUP: 3
A study of the *lingua franca* of East Africa at the elementary level. Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency.
*Note:* Not open to auditors.

**Swahili B. Intermediate Swahili**
Catalog Number: 3442
John M. Mugane and assistant
Full course (indivisible). Fall: M., W., at 5.
Continuation of Swahili A. A study of the *lingua franca* of East Africa at the elementary level. Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency.
*Note:* Not open to auditors.
*Prerequisite:* Swahili A or the equivalent of one year’s study of Swahili.

**Swahili 101ar. Reading in Swahili**
Catalog Number: 8503
John M. Mugane and assistant
Half course (fall term). M., at 7 p.m.; W., at 4.
Advanced reading in Swahili.
*Prerequisite:* Swahili B or equivalent.

**Swahili 101br (formerly African and African American Studies 121b). Reading in Swahili II**
Catalog Number: 7746
John M. Mugane and assistant
Half course (spring term). Hours to be arranged.
Advanced reading in Swahili II.
*Prerequisite:* Swahili 101ar or equivalent.

**Tigrinya**

**African and African American Studies 90r.n. Tigrinya**
Catalog Number: 77068
John M. Mugane
Half course (fall term; repeated spring term). Hours to be arranged.
Individualized study of Tigrinya at the elementary, intermediate, and advanced levels. Contact
hours with language coach. Emphasis on literacy.  
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Twi**

**Twi A. Elementary Twi**  
Catalog Number: 0023  
John M. Mugane  
*Full course (indivisible). Hours to be arranged.*  
Twi is one of the regional languages of the Akan speaking peoples of Ghana, constituting the largest ethnic group in Ghana. Twi is fast becoming the *lingua franca* of the country. This course aims to help students acquire the Twi language at the basic or elementary level.  
*Note:* The course is designed primarily for students who have no prior knowledge of Twi; however, students with minimal knowledge of the language may also register for the course. Not open to auditors.

**Twi B. Intermediate Twi**  
Catalog Number: 0025  
John M. Mugane and assistant  
*Full course (indivisible). Hours to be arranged.*  
Continuation of Twi A. Twi is one of the regional languages of the Akan speaking peoples of Ghana constituting the largest ethnic group in Ghana. Twi is fast becoming the *lingua franca* of the country. The Akan people are well known for their art and culture, especially the traditional colorful Kente cloth.  
*Note:* Not open to auditors.  
*Prerequisite:* Twi A or the equivalent of one year’s study of Twi.

**Twi 101ar. Reading in Twi**  
Catalog Number: 0026  
John M. Mugane and assistant  
*Half course (fall term). Hours to be arranged.*  
Advanced reading in Twi.  
*Note:* Not open to auditors.  
*Prerequisite:* Twi B or equivalent.

**Twi 101br. Reading in Twi II**  
Catalog Number: 0028  
John M. Mugane  
*Half course (spring term). Hours to be arranged.*  
Advanced reading in Twi II.  
*Note:* Not open to auditors.  
*Prerequisite:* Twi 101ar or equivalent.

**Wolof**
**African and African American Studies 90r.o. Wolof**
Catalog Number: 25546
John M. Mugane
Half course (fall term; repeated spring term). Fall: M., W., 5–7 p.m.; Tu., 4–5:30, Th., 6–7:30 p.m.; Spring: Tu., Th., 6–8 p.m.; Tu., 10–11:30. Individualized study of Wolof at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Xhosa**

**African and African American Studies 90r.p. Xhosa**
Catalog Number: 92175
John M. Mugane
Half course (fall term; repeated spring term). Hours to be arranged. Individualized study of Xhosa at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

**Yoruba**

**Yoruba A. Elementary Yoruba**
Catalog Number: 0029
John M. Mugane
Full course (indivisible). Hours to be arranged. Yoruba is spoken in the West African countries of Nigeria, Benin Republic, and parts of Togo and Sierra Leone, therefore constituting one of the largest single languages in sub-Saharan Africa. Yoruba is also spoken in Cuba and Brazil. Students will acquire the Yoruba language at the basic or elementary level.
*Note:* Primarily designed for students who have no prior knowledge of Yoruba. However, students with minimal knowledge of the language may also register for the course. Not open to auditors.

**Yoruba B. Intermediate Yoruba**
Catalog Number: 0031
John M. Mugane
Full course (indivisible). Hours to be arranged. Continuation of Yoruba A. Yoruba is spoken in the West African countries of Nigeria, Benin Republic, and parts of Togo and Sierra Leone, therefore constituting one of the largest single languages in sub-Saharan Africa. Yoruba is also spoken in Cuba and Brazil. Students will acquire the Yoruba language at the basic or elementary level.
Yoruba 101ar. Reading in Yoruba
Catalog Number: 0033
John M. Mugane and assistant
Half course (fall term). Hours to be arranged.
Advanced reading in Yoruba.
Note: Not open to auditors.
Prerequisite: Yoruba A or the equivalent of one year’s study of Yoruba.

Yoruba 101br. Reading in Yoruba II
Catalog Number: 0035
John M. Mugane and assistant
Half course (fall term; repeated spring term). Fall: Tu., at 3; Spring: M., 4–6.
Advanced reading in Yoruba II.
Note: Not open to auditors.
Prerequisite: Yoruba 101a or equivalent.

Zulu

African and African American Studies 90r.q. Zulu
Catalog Number: 40653
John M. Mugane
Half course (fall term; repeated spring term). Fall: W., at 10; Spring: Hours to be arranged.
Individualized study of Zulu at the elementary, intermediate, and advanced levels. Contact hours with language coach. Emphasis on literacy.
Note: This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult the Director of Language Programs for more information. Not open to auditors.

Undergraduate Tutorials

*African and African American Studies 91r. Supervised Reading and Research
Catalog Number: 1269
Tommie Shelby and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Students wishing to enroll must petition the Director of Undergraduate Studies for approval, stating the proposed project, and must have permission of the proposed instructor. Ordinarily, students are required to have taken some coursework as background for their project.

African and African American Studies 97. Sophomore Tutorial
Catalog Number: 3022 Enrollment: Limited to 30.
Carla Denny Martin
Half course (spring term). Tu., 2–4; W., at 5. EXAM GROUP: 16, 17
This course will examine the complexity of contemporary racial and ethnic experience in the
United States, focusing on self-identified "mixed-race" groups and voluntary immigrant groups from Africa, Latin America, and the Caribbean (e.g. from Brazil, Cape Verde, Ethiopia, Haiti, Puerto Rico, and Nigeria). Interdisciplinary course readings will introduce key theoretical issues in the social sciences and humanities, such as cultural relativism, the social construction of race, class, gender, sexuality, and ethnicity, and the negotiation of identity in diaspora and minority settings. Assignments will include both written work and social engagement with local communities resulting in multimedia projects.

*Note:* Required for concentrators in African and African American Studies. Open to all undergraduates. This course will count towards the Ethnic Studies concentration, 2012-13, only.

**African and African American Studies 98. Junior Tutorial - African American Studies**

Catalog Number: 6272

*Tommie Shelby and members of the Department*

*Half course (fall term; repeated spring term). Hours to be arranged.*

Students wishing to enroll must petition the Director of Undergraduate Studies for approval, stating the proposed project, and must have the permission of the proposed instructor. Ordinarily, students are required to have taken some coursework as background for their project.

*Prerequisite:* Completion of African and African American Studies 10, or a substitute course approved by the Director of Undergraduate Studies.


Catalog Number: 3070

*Tommie Shelby and members of the Department*

*Half course (fall term; repeated spring term). Hours to be arranged.*

Students wishing to enroll must petition the Director of Undergraduate Studies for approval, stating the proposed project, and must have the permission of the proposed instructor. Ordinarily, students are required to have taken some coursework as background for their project.

*Prerequisite:* Completion of African and African American Studies 11, or a substitute course approved by the Director of Undergraduate Studies.

**African and African American Studies 99. Senior Thesis Workshop**

Catalog Number: 8654

*Tommie Shelby and members of the Department*

*Full course. Hours to be arranged.*

Thesis supervision under the direction of a member of the Department.

*Note:* Enrollment limited to honors candidates.

**For Undergraduates and Graduates**

[African and African American Studies 102. The Hip Hop Generation and Post-Civil Rights Black Politics]

Catalog Number: 56863

*Laurence A. Ralph*

*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*

The representatives of this new day (sporting baggy clothes and spitting rap lyrics) seem to contrast with the public image of Civil Rights icons like Martin Luther King, Jr. (the clean cut,
orator). But despite surface dissimilarities these figures bear an eerie resemblance. Both the emcee and the orator assume that black male leadership is a reliable index for the fate of the black community. This course mixes a diverse set of readings with music and film to interrogate the specific generational tensions that structure popular and intellectual discourses concerning the "hip-hop generation" and the perceived demise of contemporary black politics. 

Note: Expected to be given in 2013–14.

**African and African American Studies 104y. Transnational Feminisms**
Catalog Number: 49412
Aisha Mahina Beliso-De Jesus (Divinity School)
Half course (spring term). Tu., 4–6. EXAM GROUP: 18

Typically understood as an unbound field, transnational feminisms comes together as a paradigm that calls attention to the intersections of globalizations, race, sexuality, diasporas and nationalisms from a transnational perspective. Mostly from third world and women of color feminists, we will examine this unwieldy designation in relation to methodologies, analytics, contentions and silences. Where and when does the emergence of this term come to be? How does it differ from other feminist and internationalist/globalization perspectives? What role (if any) does religion or spirituality play in the differing theoretical frameworks?

Note: Offered jointly with Divinity School as HDS 2749.

*African and African American Studies 109. Using Film for Social Change*
Catalog Number: 41141
Joanna Lipper
Half course (spring term). M., 3-5; and a weekly section W., 6-7. EXAM GROUP: 8, 9

New technology and democratized access to digital media powerfully impact strategies aiming to heighten global awareness of local issues and are integral to efforts seeking to inspire empathy, political engagement, social activism, and charitable giving. With a focus on race, gender, and identity, this course will explore the portrayal of the human condition across cultures in feature films, documentaries, and photography. Students will have the opportunity to create their own multimedia projects.

[African and African American Studies 111. Spectral Fictions, Savage Phantasms: Race and Gender in Anti-Racist South African and African American Drama, Fiction and Film ]
Catalog Number: 22792
Biodun Jeyifo
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16

Why have social orders like Apartheid South Africa and White Supremacy in segregated America that are based on extreme racial, gender and national oppression always generated often violent, hallucinatory fictions of the racial and gender identities of the oppressed? And why have the oppressed in turn often internalized these sorts of fictions and also produced counter-fictions that more or less conform to the same violent, phantasmic logic? In this course, we will explore how these fictions and counter-fictions are reproduced and challenged in some of the most powerful, canonical works of drama, fiction and cinema by South African and African American authors and filmmakers. As the Nigerian author, Chinua Achebe once famously remarked: "where one thing stands, another thing will stand beside it." To this end, we will pay special attention in the course to how, both in form and in content, race and gender always seem,
African and African American Studies 114x. From Cesária Évora to Dama Do Bling: Music, Language, and Digital Media in the Former Portuguese Colonies - (New Course)
Catalog Number: 62048
Carla Denny Martin
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
This course will explore contemporary musical performance and production and their interrelationship with language and digital media in Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, São Tomé and Principe, and diaspora communities in western Europe and the northeastern United States. Through interdisciplinary course readings and primary source materials (e.g. song lyrics, music videos, photographs, and social media activity), students will investigate questions of genre, authenticity, and power; creolization, hybridity, and purity; and race, gender, and sexuality in this complex cultural domain. Assignments will develop historical, ethnographic, and digital research expertise culminating in a final paper and multimedia project.

African and African American Studies 115. HBO’s The Wire and its Contribution to Understanding Urban Inequality
Catalog Number: 37899 Enrollment: Limited to 30.
William Julius Wilson
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Although journalists and media critics around the world have heaped deserved acclaim on The Wire, many people do not recognize its contribution to social science. Students in this seminar will watch, critique, and discuss selected episodes of The Wire along with assigned readings on urban inequality that relate to these episodes. The assigned readings will feature academic books and research articles that describe and analyze life and experiences in inner city neighborhoods, as well as the social, economic, political, and cultural factors that shape or influence these experiences.

African and African American Studies 117x. Of Mean Streets and Jungle Fevers: Race, Gender and Ethnicity in Martin Scorsese and Spike Lee
Catalog Number: 10829
Biodun Jeyifo
Half course (fall term). Th., 1–3:30. EXAM GROUP: 15, 16
Against the background of radical theories of racial formation and identity politics in America, this course will comparatively explore controversial images of African Americans and Italian Americans in selected films of two of the most important contemporary American filmmakers, Martin Scorsese and Spike Lee. On their road to becoming iconic figures in America’s contemporary cinematic and artistic avant-garde, Scorsese and Lee radically transformed received or conventional perceptions of Italian Americans and African Americans in mainstream American film. In this course, we will explore both similar and contrastive styles and approaches by the two filmmakers. Special attention will be paid to popular and scholarly discourses that the selected films of Scorsese and Lee have generated.
**African and African American Studies 118. The History of African Americans From the Slave Trade to the Great Migration**

Catalog Number: 7429  
Kellie C. Jackson  
_Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13_  
Topics include the rise of slavery; the American Revolution and the problem of freedom; African American social, economic, and cultural life in the antebellum North and South; the Civil War; Reconstruction; African Americans in the Jim Crow South; and the Great Migration. Thematically, we explore the meaning of freedom, the dynamic between black struggle and white resistance, and the ways in which factors like gender and geography complicated any notions of a single black experience.

**African and African American Studies 119x. Chocolate, Culture, and the Politics of Food - (New Course)**

Catalog Number: 10526  
Carla Denny Martin  
_Half course (spring term). M., W., at 2, and a weekly section to be arranged. EXAM GROUP: 7_  
This course will examine the sociohistorical legacy of chocolate, with a delicious emphasis on the eating and appreciation of the so-called "food of the gods." Interdisciplinary course readings will introduce the history of cacao cultivation, the present day state of the global chocolate industry, the diverse cultural constructions surrounding chocolate, and the implications for chocolate’s future of scientific study, international politics, alternative trade models, and the food movement. Assignments will address pressing real world questions related to chocolate consumption, social justice, responsible development, honesty and the politics of representation in production and marketing, hierarchies of quality, and myths of purity.

**African and African American Studies 120x. African American Theatre, Drama, and Performance - (New Course)**

Catalog Number: 73581  
Robin M. Bernstein  
_Half course (fall term). M., W., at 1. EXAM GROUP: 6_  
A study of African American practices of performance from the 19th century through the present. This seminar will meet twice each week: first, in a classroom to discuss scholarship on black performance, and second, in a Harvard archive to work directly with primary materials. Topics include abolitionism, the Harlem Renaissance, the Black Arts Movement, and hiphop.

**African and African American Studies 124. Tobacco and Sugar - (New Course)**

Catalog Number: 86852  
Doris Sommer  
_Half course (fall term). W., 12–1:30; . EXAM GROUP: 5, 6_  
Cuban Counterpoint Between Tobacco and Sugar (Fernando Ortiz 1940) will guide explorations of aesthetic and historical tensions throughout the Spanish Caribbean. Particular crops cultivated divergent political - cultural responses. Along with musical forms, plastic arts, and politics, we...
concentrate on literary works including abolitionist Cecilia Valdes, El reino de este mundo, the Dominican Over, Puerto Rico’s La charca, Jamaica’s Wide Sargasso Sea, writings by Hostos, Bono, Mintz, Klein, among others.

**African and African American Studies 131. African American Literature from the Beginnings to the Harlem Renaissance**

Catalog Number: 2589

Glenda R. Carpio

_Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_


*Note:* This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**African and African American Studies 133. Zora Neale Hurston, Richard Wright, Ralph Ellison**

Catalog Number: 47899

Glenda R. Carpio and Werner Sollors

_Half course (fall term). Tu., 2–4, Th., at 3. EXAM GROUP: 16, 17_

Investigates the development of Wright’s sociological and Hurston’s anthropological imagination, and their influence on Ellison’s postwar modernism, with special emphasis on literary form. Readings include published and some unpublished writings (fiction and non-fiction), against the background of selected criticism. PLEASE NOTE: The course meets for a third hour on Th., 3-4.

**African and African American Studies 135X. Reading Du Bois - (New Course)**

Catalog Number: 50691

Tommie Shelby and Walter Johnson

_Half course (fall term). W., 1–3. EXAM GROUP: 6, 7_

This course will treat the historical and political writings of W. E. B. Du Bois-historian, activist, philosopher, and social theorist, one of the foremost intellectuals of the twentieth century, and arguably the founder of the field of African and African American Studies. From The Suppression of the African Slave Trade to the United States of America (1896) to The World and Africa (1947), Du Bois traced a course across many of the most important currents of global, black, and intellectual history: Pan-Africanism, Marxism, and Anti-imperialism, in particular.


Catalog Number: 16591

Marla F. Frederick

_Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17_

Since Emancipation African American religious leaders and their congregants have employed
religion not only as a means of achieving social and political mobility, but also as a means of securing economic growth and independence in light of the conditions created under American capitalism. These approaches have varied from the pragmatic strategies of Booker T. Washington, the socialist leanings of Rev. George Washington Woodbey, the "poor people’s campaign" of Rev. Martin Luther King, Jr., and the increasingly popular prosperity ministries of today’s neo-Pentecostal and Word of Faith communities. Such changes in strategies often coincide with changes in America’s political economy over the past century. This course attempts to interrogate the development of these various strands of economic thought using texts by scholars like Max Weber (The Protestant Ethic and the Spirit of Capitalism), E. Franklin Frazier (The Black Bourgeoisie), and David Harvey (An Introduction to Neoliberalism) as anchoring texts to frame the social, economic and political contexts in which these strategies emerge. Other texts, including autobiographies, ethnographies, and histories offer details of how these religious understandings are framed and practiced.

Note: Expected to be given in 2013–14.

**African and African American Studies 137. Literature and Its Cultural ‘Others’ - America, Africa and the Caribbean, 1950s-80s**

*Catalog Number: 3258*

*Biodun Jeyifo*

*Half course (fall term). Tu., 1–3.*

In the historic contexts of the civil rights struggles in the United States and the decolonizing liberation struggles in Africa and the Caribbean, this course explores how utopian or emancipatory aspirations in diverse media like literature, popular music, oratory, non-scripted street or community theatre, and popular visual media like poster art, murals, and graffiti impact people of different social classes and backgrounds.

**African and African American Studies 139x. Slavery and Emancipation in the Atlantic World**

*Catalog Number: 93434*

*Kellie C. Jackson*

*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*

History is often interpreted as the struggle for power. This course examines how resistance plays a central role in the formation of individual and collective identities among black historical actors in the Atlantic world. The course focuses on the power struggles and efforts by black people to affect social and political change particularly during the eighteenth and nineteenth century. In this class students will cover the significance of major slave rebellions, revolutions, and abolitionist movements within the Atlantic world. Among the questions we consider are: How do powerless people acquire and exercise power? What are the obstacles they must overcome? How do black people living in the Atlantic world perceive, predict, and procure power? How do they define their own empowerment? The course will offer insights on the complexity of the region’s peoples, and will contribute to students’ critical thinking. In papers, students will discuss interpretive questions that focus specifically on the representations, historiographical debates, and the theory of Atlantic world history.

[African and African American Studies 142. Hiphop and Don’t Stop: Education and Know-the-Ledge]
Marcyliena Morgan

Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13

Hiphop is a global phenomenon that influences social life far beyond the music and entertainment industries. Yet beyond descriptions and critiques of its mass appeal, few have considered hip-hop’s development of standards and evaluations across all artistic areas and culture. Moreover, the consequences of an audience trained in the changing standards of hip-hop and charged with upholding them, has not been thoroughly explored. This course provides a critical examination of hip-hop in the US and its role as a cultural, political and artistic resource for youth. It will explore the artistic, social, cultural, linguistic and political implications of hip-hop. It is taught from the perspective of cultural and linguistic anthropology and media studies. Each year the course will include a special topic with guest lecturers. Topics include: gender and sexuality, spirituality, health, psychology, philosophy, education, politics, art, nationalism, etc.

Note: Expected to be given in 2013–14.

African and African American Studies 143. Representing Blackness: Media, Technology and Power in Hiphop Culture (With Tahir Hemphill)
Catalog Number: 0444
Marcyliena Morgan

Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17

This course will focus on on-line networking and communicating around race, gender and identity. It will be a case study of the Hiphop Word Count (HHWC), an educational, linguistic and cultural assessment of lyrics. It will also include a mapping project where lyrics and words are mapped throughout time and place through the development of psycho-geography. The Internet, with its profusion of social networking sites and ever increasing formats for communication both challenges the notion of identity and a Black social network and enthusiastically confirms its existence. The existence of an online community and network for communication is conveyed through naming, describing norms and values of communication, rules of interaction, representing identities, etc. Moreover, membership is often constituted and challenged through language ideology as interaction has developed from emails and forums to social networking interaction and various forms of interaction through blogging, where the blogger can choose to include conversations through comments and posts. In all cases, information and meaning are being negotiated and assessed.

African and African American Studies 145x. The Hiphop Cipher: "These are the Breaks" (With 9th Wonder) - (New Course)
Catalog Number: 99254
Marcyliena Morgan

Half course (spring term). W., 10–12. EXAM GROUP: 3, 4

The Hiphop Cipher is an in-depth look at aspects of hiphop. It is for students who have taken courses on hiphop and popular music and culture. It closely examines a particular issue and topic and includes guest lecturers and master classes on areas or issues in hiphop culture, art, scholarship and performance. Spring 2013 will feature Grammy Winning producer 9th Wonder. These are the Breaks: The connection between vinyl from the 60’s, 70’s and 80’s and birth of what we now know as hip-hop music, is a connection that is known by producers, DJ’s and collectors of music, but not to academia. Various political, cultural, and social movements of the
1960’s created an environment for the stories of soul, jazz, and funk produced in the 1970’s, which in turn created the platform for our most treasured hip-hop albums (Illmatic, The BluePrint, The Chronic, College Dropout, The Minstrel Show). "Diggers" from around the world travel from country to country, from record shop to basement, in search of the original "breaks" used for these albums, in some cases for 10+ years. This course examines the important breakbeats in hiphop and the cultural, political and social movements and contexts that the beats, songs and production represented.

**African and African American Studies 147. Racial Identity, Politics, and Public Policy**
Catalog Number: 2929  
**Lawrence D. Bobo**  
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
This course examines how race and perceived racial difference affect political discourse, mobilization, representation, and political outcomes. We will examine the fate of policies such as affirmative action and welfare reform, and the prospects for multiracial coalition politics. We will also consider the role of elected representatives, the media, and the traditional racial divide in affecting political outcomes of importance to African Americans and to other communities of color.

Catalog Number: 23973  
**Marcyliena Morgan**  
*Half course (fall term). M., 11–12:30. EXAM GROUP: 4, 5*
This seminar is a comprehensive study of culture, communication and gender in African Diasporan communities. It introduces students to the field of gender and communication and some of the principal questions of feminist theory, as viewed from linguistics, media studies and sociolinguistics. It provides an introduction to debates surrounding gender and technology, including historiography and theoretical perspectives on feminism and technology from various perspectives. This course will explore an approach to gender and communication that emphasizes the grounding in social practice of both. The course has a strong international and multicultural focus, drawing on descriptions of women and men’s speech across the globe. The lectures and in-class activities explore the principal concepts and issues that define the field of gender, culture and communication. These areas include: sociolinguistics, discourse and interaction, gender and culture, communication theory, gender and media, cultural studies, political economy, and symbolic communication. In particular, we will examine how everyday interactions, media, film, popular culture and journalism, incorporate gender and sexuality and at times perpetuate stereotypes of men, women and sexuality in general.  
*Note:* Expected to be given in 2013–14.

Catalog Number: 90602  
**Marcyliena Morgan**  
*Half course (spring term). Hours to be arranged.*
This seminar is a comprehensive study of the representation of gender, love and sexuality in
African American and African Diasporan culture. It introduces students to the field of gender and sexuality and some of the principal questions of feminist theory, as viewed from linguistics, anthropology, media studies and literature. The course has a strong international and multicultural focus, drawing on descriptions of women and men’s speech, interaction and representation across the globe. Materials examined include film, novels, music and the examination of numerous cultural practices. The lectures and in-class activities explore the principal concepts and issues that define the field of gender, culture and communication. These areas include: sociolinguistics, discourse and interaction, gender and culture, communication theory, gender and media, cultural studies, political economy, and symbolic communication. In particular, we will examine how everyday interactions, media, film, popular culture and journalism, incorporate gender and sexuality and at times perpetuate stereotypes of men, women and sexuality in general.

Note: Expected to be given in 2013–14.

**African and African American Studies 160. Christianity, Identity, and Civil Society in Africa**
Catalog Number: 88142
*Jacob Olupona*

*Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18*
This course is a historical survey of the centuries-old Christian traditions in Africa. It begins with an outline of the trajectory of Christianity’s origins and presence in Africa from its beginning in ancient Mediterranean lands through the early period of European missionaries to the contemporary period. The course provides the ethnography of the old mission churches, indigenous independent African churches, and contemporary evangelical and Pentecostal Charismatic movements. The course explores the role of Christianity in relation to historical, cultural, social, and material realities of the African continent. It examines a broad range of topical issues related to conversion, missionization, and the development and growth of Christian agencies in Africa in relation to the construction of social, theological, and religious identities, as well as Christianity’s response to cultural pluralism, nationhood, citizenship, and civil society.

Note: Offered jointly with the Divinity School as 2337.

Catalog Number: 51727
*Jacob Olupona*

*Half course (spring term). Hours to be arranged.*
This seminar explores critical and interdisciplinary approaches to the place of religion and the emergence of the new immigrant and diaspora communities in the modern world, and the discourses emerging from the practice of diaspora and migration scholarship. Using historical, ethnographic, and textual sources, the course will illuminate the lived religious experiences of immigrant and diaspora communities in the United States and elsewhere. It introduces critical perspectives on forms of interaction between religion and other aspects of social identity - ethnicity, gender, nationality, race, age, and sexuality, as well as transnational and global influences on social and cultural identity. The course also examines the complex networks of economic, cultural, and technological innovations that the "new" diaspora and immigrant communities have developed to make sense of their spiritual and cultural lives in new situations.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3702.
Catalog Number: 66834
Jacob Olupona
Half course (fall term). Tu., 3-5.
This seminar explores historical, theoretical, methodological, and conceptual issues central to the study of indigenous religions of the world. It examines the critique of indigeneity and explores emerging topics about the role that religion plays in indigenous peoples’ lives, communities, and societies. Special topics will explore issues related to land, environment, conversion, health, the state, gender, aggression, violence, justice, and human rights. The seminar examines the interface of indigenous religions and modernity, colonial and postcolonial conditions, and local and global forces that shape the practices of indigenous traditions in various regions of the world.
Note: Expected to be given in 2014–15. Offered jointly with the Divinity School as 3703.

Catalog Number: 96803
Marcyliena Morgan
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
This course focuses on African American English and discourse and provides a critical exploration into the notions of language life, death and power. It is concerned with the language, discourse and symbolic systems that construct and represent race, class and gender in the US. We use methods from linguistic anthropology and philosophy to explore language ideologies and the relationship between power and powerful speech. In this course we will review and critique theories of language, communication, culture, and identity as they relate to ethnicity, race, gender, and power. In particular, we are interested in how language mediates and constructs identity, how we associate language with race, class and gender, and how we resist and manipulate these associations. To answer these questions we examine both public and popular culture, as well as education, literature, film and other media. Topics include: Discourse of Politics, Race, Class, Radical Language Theory and Ideology, Breaking and Making Linguistic Rules. Marking Blackness, Normalizing Blackness, Grammaticalization and Ideology.
Note: Expected to be given in 2013–14.

[African and African American Studies 166. Women’s Language and Discourse in the African Diaspora] - (New Course)
Catalog Number: 54187
Marcyliena Morgan
Half course (fall term). Hours to be arranged.
The course focuses on language as a social construct and its importance and constitutive function in culture, appropriation, and performance of gender within and across traditional and national lines. The purpose of this course is to study, analyze and critique theories concerning the discursive construction of gender identity(s) and forms of representation of cultures. It will explore the relationship between power and powerful speech through reviews and critiques of theories of language, culture, and identity as they relate to gender, and nationalism. In particular, we will focus on how language and identity are constructed and mediated in literature, film and other media. Finally we will explore language and discourse surrounding women’s language as
well as language discourse styles used in the construction of regional, national, and global communities.

*Note:* Expected to be given in 2014–15.

**African and African American Studies 169. Visualizing Africa - (New Course)**
Catalog Number: 94098
*Suzanne P. Blier*
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
An examination of the various ways in which Africa historically has been conceptualized and visualized in art and illustrative materials. Emphasis is given to the critical reading of actual works of art and documents. Construction of self and others as seen through images is discussed. The interface between Africa and the Christian and Islamic worlds as well as larger concerns of slavery, colonialism, and contemporary art are examined.

**[African and African American Studies 170. The African Past: Art and History to 1800]**
Catalog Number: 25009
*Suzanne P. Blier*
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*
This course takes up key issues in the history of ancient Africa as framed principally around divergent forms of visual culture. In addition to exploring core writings and theoretical issues, students also will explore underlying interrelationships between localities, regions, and more broadly continental forms and events as seen through the interplay of geography, socio-economics, and cultural dynamics.

*Note:* Expected to be given in 2013–14.

**[African and African American Studies 174. The African City]**
Catalog Number: 6977
*Suzanne P. Blier*
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
This seminar investigates critical issues in Africa’s rich urban centers. Architecture, city planning, spatial framing, popular culture, and new art markets will be examined.

*Note:* Expected to be given in 2013–14.

**[African and African American Studies 178. Health, Society, and Subjectivity in the American Context]**
Catalog Number: 39051
*Laurence A. Ralph*
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
While diseases are often imagined to be scientific, medical conditions, they are also social constructs. In the nineteenth century, for example, the condition of Dysaesthesia Aethiopis (an ailment that made its sufferers "mischievous") was considered nearly universal among free blacks. Today, diseases like AIDS and tuberculosis are often associated with personal attributes, while the social forces at work to structure risk for acquiring these illnesses are glossed over. This course examines the ways people reproduce and challenge contemporary visions of society through the lens of social injury, and in the process cultivate subjectivities that are marked by
2012-2013 Previous Courses of Instruction

Note: Expected to be given in 2013–14.

[African and African American Studies 179 (formerly Literature and Arts B-82). Jazz, Freedom, and Culture]
Catalog Number: 9532
Ingrid Monson
Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4

This course explores the history of jazz improvisation as a musical process, as well as, the cultural, aesthetic, and social debates that shaped the development of the music. On the one hand, jazz fashioned itself as the ultimate modern music with freedom and justice for all, and, on the other, provided an arena in which complex debates about race, cultural ownership, and social disparity repeatedly took place. Understanding of the process of improvisation is paramount, as the freedom of musical expression in jazz is contrasted with the lack of freedom provided by the social and legal contexts in which the music developed.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B.

[African and African American Studies 180x. Race, Class and the Making of American Religion]
Catalog Number: 68933
Marla F. Frederick
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16

This class explores the ways in which both race and class are implicated in the development and practice of religion in the U.S. Through historical, anthropological and sociological works we explore the theoretical underpinnings of race and class and ponder their influence upon varying expressions of Islam, Judaism and Christianity.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2599.

[African and African American Studies 181. Image of the Black in Western Art - (New Course)]
Catalog Number: 18563
Suzanne P. Blier and David Bindman
Half course (fall term). M., 3–5. EXAM GROUP: 8, 9

This seminar will critically examine the depiction and contextualization of individuals of African descent in European and American art. Among the various issues raised are historic changes in the idea of and construction of race, the impact of early internationalism, notions of difference in the age of exploration, slavery and notions of selfhood, and representation as part of the larger colonial project.

Catalog Number: 7973
Ingrid Monson
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
The course focuses on the history of African American popular music from Ray Charles to P-Funk to Erykah Badu with particular emphasis on its long-term impact on American culture. The rise of classic R & B, Soul, Motown, Funk, the Philly Sound and Neo-Soul are featured. Key artists include Ray Charles, Aretha Franklin, the Supremes, Curtis Mayfield, James Brown, Stevie Wonder, George Clinton, Michael Jackson, Jill Scott, Erykah Badu, Usher, and D’Angelo. The course is especially concerned with tracing the interrelationships among music, politics, spirituality, and race relations during the Civil Rights and Black Power years and their legacy for today. During these years the sound of African America indelibly shaped mainstream American popular culture in far reaching and transformative ways.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for either Culture and Belief or Aesthetic and Interpretive Understanding, but not both. This course, when take for a letter grade, meets the Core area requirement for Literature and Arts B.

**African and African American Studies 183x. Queer of Color Theory - (New Course)**
Catalog Number: 58474
Robin M. Bernstein
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
An advanced seminar in theories and processes of theory-making by queer people of color in the US from the Harlem Renaissance through the present. Topics include feminism, AIDS, spirituality, community, migration, affect, and performance. Texts include works by Audre Lorde, Cherrie Moraga, Gloria Anzaldúa, Marlon Riggs, Cathy Cohen, E. Patrick Johnson, José Esteban Muñoz, Cheryl Dunye, David Eng, Sharon Bridgforth, Omi Osun Joni Jones, Roderick Ferguson, and Jewelle Gomez.

[African and African American Studies 186x. Childhood in African America] - (New Course)
Catalog Number: 22059
Robin M. Bernstein
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.

**African and African American Studies 187. African Religions**
Catalog Number: 0094
Jacob Olupona
Half course (fall term). Th., 4–6. EXAM GROUP: 18
This course is a basic introduction to the history and phenomenology of traditional religions of the African peoples. Using diverse methodological and theoretical approaches, the course will explore various forms of experiences and practices that provide a deep understanding and appreciation of the sacred meaning of African existence: myth, ritual arts, and symbols selected from West, East, Central, and Southern Africa.
Note: Offered jointly with the Divinity School as 3690.

**African and African American Studies 189x. Medicine, Culture, and Society - (New Course)**
Catalog Number: 26092 Enrollment: Limited to 50.
Jean Comaroff  
**Half course (spring term). W., 2–4. EXAM GROUP: 7, 8**
This course examines the changing place of medicine in the long history of modernity. Focusing on key moments - the birth of the clinic, the colonial frontier (where biomedicine met its therapeutic "others"), the consolidation of medicine as self-governing profession, the age of genomics and biocapital - it explores the distinctive role of medical knowledge in the making of modernist persons, identities, and social worlds. Readings are drawn from across the social sciences, with material from Africa, Europe, and North America. Part lecture, part discussion, the class will be open to upper-level undergraduates and graduates.

**African and African American Studies 190x. The Anthropology of Law: Perspectives from Africa and Elsewhere - (New Course)**
Catalog Number: 92721 Enrollment: Limited to 25.  
John Comaroff  
**Half course (spring term). W., 2–4. EXAM GROUP: 7, 8**
The course will cover (i) classical readings in the field, (ii) conceptual questions focusing on the often counter-intuitive theoretical insights to be gained from the non-Western legal systems, (iii) law and colonialism, (iv) liberalism, difference, and the law in the postcolonial world, and (v) the judicialization of politics around the globe. Throughout, attention will be given to the lessons to be learned from legal anthropology for interrogating the present moment in the global north. Grades will be based on class participation, course presentations, and a term paper.  
**Note:** Offered jointly with HLS as 2535.

**African and African American Studies 191x. African American Lives in the Law**
Catalog Number: 32391  
Evelyn Brooks Higginbotham  
**Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17**
This seminar focuses on biographical and autobiographical writings in a historical examination of the role of the individual in the American legal process. We will seek to understand how specific African Americans (as lawyers, judges, and litigants) made a difference-how their lives serve as a "mirror to America"—and also to understand the ways personal experience informs individual perspectives on the law and justice.

**[African and African American Studies 192x. Religion and Society in Nigeria]**
Catalog Number: 8241  
Jacob Olupona  
**Half course (spring term). Th., 4–6. EXAM GROUP: 18**
The seminar examines the historical development of religion in Nigeria and explores its intersection with ethnic identity, culture, and society in pre-colonial, colonial, and contemporary periods. The course provides an understanding of various cultural tradition, historical events, and social forces that have shaped Nigeria’s religious express. Many topical issues will be explored such as indigenous religious culture, Christian and Muslim identities, civil religion, and civil society and democratization, as well as religion and politics in present-day Nigeria.  
**Note:** Expected to be given in 2013–14. Offered jointly with the Divinity School as 3704.
African and African American Studies 197. Poverty, Race, and Health
Catalog Number: 5172
David Williams
Half course (spring term). Th., 4–6. EXAM GROUP: 18
This course critically examines the health status of the poor, and of African Americans and other socially disadvantaged racial and ethnic groups in the US. Attention will be focused on the patterned ways in which the health of these groups is embedded in the social, cultural, political, and economic contexts, and arrangements of US society. Topics covered include the meaning and measurement of race, the ways in which racism affects health, the historic uses of minorities in medical research, how acculturation and migration affects health, and an examination of the specific health problems that disproportionately affect nondominant racial groups.

Primarily for Graduates

Catalog Number: 56306 Enrollment: Limited to 15.
Jean Comaroff and John Comaroff
Half course (fall term). M., 12–1:30 and 6–7:30 p.m. EXAM GROUP: 5, 6, 9
In a story titled Africa Rising (2011), The Economist argued that the continent epitomizes both the "transformative promise of [capitalist] growth" and its bleakest dimensions. This workshop will explore Africa’s changing place in the world - and the new economies, legalities, socialities, and cultural forms that have arisen there. It will also interrogate the claim that the African present is a foreshadowing of processes beginning to occur elsewhere; that, therefore, it is a productive source of theory about current conditions world-wide. The workshop, open to faculty and students, will meet Mondays from 6:00-7:30. 15 students will be permitted to take it as a course; they will also meet on Mondays, 12:00-1:30. Grades will be based on participation and a term essay.

Catalog Number: 65212 Enrollment: Limited to 15.
Jean Comaroff and John Comaroff
Half course (spring term). M., 12–1:30, M., 6–7:30 p.m. EXAM GROUP: 5, 6, 9
In a story titled Africa Rising (2011), The Economist argued that the continent epitomizes both the "transformative promise of [capitalist] growth" and its bleakest dimensions. This workshop will explore Africa’s changing place in the world - and the new economies, legalities, socialities, and cultural forms that have arisen there. It will also interrogate the claim that the African present is a foreshadowing of processes beginning to occur elsewhere; that, therefore, it is a productive source of theory about current conditions world-wide. The workshop, open to faculty and students, will meet Mondays, 6:00-7:30. 15 students will be permitted to take it as a course; they will also meet on Mondays, 12:00-1:30. Grades will be based on participation and a term essay.

[African and African American Studies 218. Topics in African American History]
Catalog Number: 9951
Instructor to be determined.
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
This graduate readings seminar surveys African American history from the slave trade through the early twentieth century. We will examine the experiences of African Americans alongside the history of race relations in a larger American context. Topics include slavery, abolition, and the transition to freedom; regional and cultural differences among African Americans; black politics; and issues of gender and class in black communities. We will also discuss the nature of historical inquiry and differing modes of historical interpretation.
Note: Expected to be given in 2013–14.

[African and African American Studies 228. Performing Race] - (New Course)
Catalog Number: 54978
Robin M. Bernstein
Half course (fall term). Hours to be arranged.
Note: Expected to be given in 2014–15.

Graduate Courses

*African and African American Studies 301. Graduate Proseminar
Catalog Number: 3120
Marcyliena Morgan and members of the Department
Half course (fall term). Tu., 12–2.
Students are introduced to major themes, classic texts, and representative current work in the broad interdisciplinary field of African and African American Studies, with a focus on the Humanities (Literature, Art, Music, and Religion).
Note: Required for all graduates in African and African American Studies in their first year.

*African and African American Studies 302. Graduate Seminar
Catalog Number: 7559
James Sidanius 5371 and members of the Department
Half course (spring term). Tu., 12–2.
Students are introduced to major themes, debates and texts in the broad interdisciplinary field of African and African American Studies. African and African American Studies 302, in the spring term, focuses on the social sciences.
Note: Required for all graduates in African and African American Studies in their first year. Ordinarily, only graduate students affiliated with the program will be permitted to attend.

*African and African American Studies 310. Individual Reading Tutorial
Catalog Number: 1374
2012-2013 Previous Courses of Instruction

leave 2012-13), Marcyliena Morgan 2212, John M. Mugane 4776, Jacob Olupona 5608, Orlando Patterson 1091, Laurence A. Ralph 1676 (on leave 2012-13), Tommie Shelby 3863, Kay Kaufman Shelemay 3483, James Sidanisus 5371, Werner Sollors 7424 (on leave spring term), Doris Sommer 2744, John Stauffer 1006, Mark R. Warren (Education School) 2010, David Williams 5778, and William Julius Wilson 2401

Allows students to work with an individual member of the faculty in a weekly tutorial.

Note: Students may not register for this course until their adviser and the faculty member with whom they plan to work have approved a program of study.

*African and African American Studies 390. Individual Research
Catalog Number: 4046

Requires students to identify and carry out a research project under the guidance of a member of the faculty. Graduate students may use this course to begin work on the research paper required for admission to candidacy.

*African and African American Studies 391. Directed Writing
Catalog Number: 4587

Requires students to identify a major essay and carry it out under the guidance of a member of the faculty. Graduate students may use this course to begin to work on the research paper that is a requirement of admission to candidacy.
*African and African American Studies 398. Reading and Research
Catalog Number: 0427
Note: Permission of the instructor and the Director of Graduate Studies is required for enrollment.

*African and African American Studies 399. Direction of Doctoral Dissertations
Catalog Number: 8411

Cross-listed Courses of Interest to Students Pursuing the African Track

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
*BPH 322. Study of Epidemiologic and Biological Characteristics of HIV Viruses in Africa Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Egyptian Aa. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs I
*Egyptian Ab. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs II
*Freshman Seminar 31o. Negotiating Identity in Postcolonial Francophone Africa and the Caribbean
[Government 1100. Political Economy of Development]
Government 1197. The Political Economy of Africa
[Government 2227. The Politics and Economics of Africa]
[*History 77a. Alcohol in Sub-Saharan Africa, 1850 to the Present]
[*History 87a. Health, Disease, and Ecology in African History]*

[History 1700. The History of Sub-Saharan Africa to 1860]

**History 1701. West Africa from 1800 to the Present**

[History 1702 (formerly History 1923). Violence, Substances and Mental Illness: African Perspectives: Conference Course]

[History 1703. Africa and the Wider World since 1800: Conference Course]

[History 1704 (formerly Societies of the World 39). Slavery and Slave Trade in Africa and the Americas]

**History 2708. Sources, Methodology, and Themes in African History: Seminar**

[History 2709. Themes in Modern Sub-Saharan African History: Proseminar]

[History of Art and Architecture 193g. Global Africa: Introduction to Art and Visual Culture]

[Literature 125. The Desire for Narrative: Across Cultures, Forms and Media]

[Literature 141. Comparative Modern Anglophone Drama - A Seminar on Genealogy]

**Music 208rs. Ethnomusicology: Seminar - (New Course)**


**Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation**

**Cross-listed Courses of Interest to Students Pursuing the African American Track**

**Aesthetic and Interpretive Understanding 13. Cultural Agents**

[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]

[Anthropology 1682. Gangsters and Troublesome Populations]

[Anthropology 2706. Disease, Disability, and the Body]

[Culture and Belief 49 (formerly Literature and Arts A-86). American Protest Literature from Tom Paine to Tupac]

*Dr**amatic Arts 167x. Hip Hop and Spoken Word: Theater Performance Laboratory - *(New Course)*

[Economics 1816. Race in America]

*English 61. Diffusions: Not on Native Grounds*

*English 62. Diffusions: Castaways and Renegades*

*English 90eo. Emancipation I: Seminar - (New Course)*

*English 90et. Emancipation II: Seminar - (New Course)*

**English 172. New Immigrant Narratives**

*Freshman Seminar 36e. African American Visions of American Empire - (New Course)*

*Government 94ef. Black Politics in the Post Civil Rights Era*


[*History 84g. Harvard and Slavery]*

*History 84h. The Northern Side of the Civil Rights Movement*

[History 1704 (formerly Societies of the World 39). Slavery and Slave Trade in Africa and the Americas]

[History 2443. Slavery, Capitalism, and Imperialism in the 19th century United States: Seminar]*

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History 2463. Graduate Readings in 20th-Century African-American History: Seminar
*History 2467hf. Everyday Life: The Textures and Politics of the Ordinary, Persistent, and Repeated: Seminar - (New Course)
*History and Literature 90l. Stories of Slavery and Freedom
[History of Science 245. The Changing Concept of Race in Science and Medicine in the United States: From Jefferson to Genomics (Graduate Seminar in General Education)] - (New Course)
[History and Literature 141. Comparative Modern Anglophone Drama - A Seminar on Genealogy]
Music 219r. 19th- and 20th-Century Music
*Psychology 2451. Psychology of Racism, Prejudice, and Discrimination - (New Course)
*Psychology 2570r. Intergroup Relations: Research Seminar
Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation
[*Sociology 98B. Race and Crime]
*Sociology 98L. Racism and Anti-Racism in Comparative Perspective
[*Sociology 98Wb. Race, Poverty, and Family Justice]
Sociology 183. Race and Ethnic Relations
[*Sociology 236. Selected Topics in Culture and Inequality]
Sociology 248. Race, Politics, and Social Inequality: Seminar
Sociology 254. Social Structure and Culture in the Study of Race and Urban Poverty
[*Sociology 300hf (formerly *Sociology 300). Workshop on Race: Black Youth Culture]
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]
United States in the World 34. The Civil War from Nat Turner to Birth of a Nation

African Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on African Studies

Caroline M. Elkins, Professor of History (Chair) (on leave 2012-13)
Lucie E. White, Louis A. Horvitz Professor of Law (Law School) (Acting Chair)
Marylyn Martina Addo, Assistant Professor of Medicine (Medical School)
Leila N. Ahmed, Victor S Thomas Professor of Divinity (Divinity School)
Emmanuel K. Akyeampong, Professor of History and of African and African American Studies
Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures
Robert H. Bates, Eaton Professor of the Science of Government and Professor of African and African American Studies (on leave 2012-13)
Theresa Stichick Betancourt, Associate Professor of Child Health and Human Rights (Public Health)
Jacqueline Bhabha, University Advisor on Human Rights Education, Professor of the Practice of Health and Human Rights (Public Health), Director of Research FXB Center (Public Health), and Jeremiah Smith, Jr. Lecturer on Law (Law School)
Suzanne P. Blier, Allen Whitehill Clowes Professor of Fine Arts and Professor of African and African American Studies
David E. Bloom, Clarence James Gamble Professor of Economics and Demography (Public Health)
Lawrence D. Bobo, W. E. B. Du Bois Professor of the Social Sciences
Thomas F. Burke, Assistant Professor of Surgery (Medical School)
Jean Comaroff, Alfred North Whitehead Professor of African and African American Studies and of Anthropology
John Comaroff, Hugh K. Foster Professor of African and African American Studies and of Anthropology
Sarah Elizabeth Dryden-Peterson, Assistant Professor of Education (Education School)
Catherine Siobhan Meihua Duggan, Assistant Professor (Business School)
Christopher Paul Duggan, Associate Professor of Pediatrics (Medical School)
Myron Essex, Mary Woodard Lasker Professor of Health Sciences (Public Health)
Susan Farbstein, Assistant Clinical Professor of Law (Law School)
Wafaie W. Fawzi, Richard Saltonstall Professor of Population Sciences, and Professor of Nutrition (Public Health)
Deborah D. Foster, Senior Lecturer on Folklore and Mythology
Henry Louis Gates, Jr., Alphonse Fletcher, Jr. University Professor
Evelyn Brooks Higginbotham, Victor S. Thomas Professor of History and of African and African American Studies
Allan G. Hill, Andelot Professor of Demography (Public Health)
Michael J. Hiscox, Clarence Dillon Professor of International Affairs
Nahomi Ichino, Associate Professor of Government
Bassey E. Irele, Librarian for Sub-Saharan Africa (ex officio)
Biodun Jeyifo, Professor of African and African American Studies and of Comparative Literature (on leave spring term)
Calestous Juma, Professor of the Practice of International Development (Kennedy School)
Michael R. Kremer, Gates Professor of Developing Societies
Jennifer Leaning, Francois-Xavier Bagnoud Professor of the Practice of Health and Human Rights (Public Health)
Ingrid Monson, Quincy Jones Professor of African-American Music, Supported by the Time Warner Endowment (on leave 2012-13)
John M. Mugane, Professor of the Practice of African Languages and Cultures and Director of the African Language Program
Nawal Mohamed Nour, Associate Professor of Obstetrics, Gynecology and Reproductive
Biology (Medical School)
Nathan J. Nunn, Professor of Economics
Jacob Olupona, Professor of African and African American Studies and Professor of African Religious Traditions
Phuong Pham, Research Scientist (Public Health)
Mindy Roseman, Lecturer on Law (Law School)
Kay Kaufman Shelemay, G. Gordon Watts Professor of Music and Professor of African and African American Studies
Michael J. VanRooyen, Professor of Medicine (Medical School)
Patrick Vinck, Research Scientist (Public Health)

The Committee on African Studies is a multidisciplinary group of scholars whom the Dean of the Faculty of Arts and Sciences appoints to coordinate teaching and research on sub-Saharan Africa across the Faculty of Arts and Science’s departments and all of the graduate and professional schools. The Committee serves as an intellectual hub, connecting faculty and students with a shared interest in Africa; it is also concerned with the planned development of African Studies across the University.

The Committee’s goal is to advance knowledge and understanding of African peoples and cultures throughout the University. So in addition to supporting classes about Africa, the Committee organizes and sponsors lectures, seminars, conferences, films, and exhibitions about Africa. Its non-credit Africa Seminar Series is open to all faculty members and students.

The Committee also offers semester grants to student groups with an Africa focus and summer grants for students traveling to Africa. To stay current with all of the latest African activities at Harvard, students, faculty, and members of the broader Harvard community can subscribe to a weekly e-newsletter by visiting the Committee’s Website, www.africa.harvard.edu. For additional information about African Studies at Harvard, please consult the Committee’s Website at www.africa.harvard.edu or e-mail cafrica@fas.harvard.edu.

Students interested in pursuing an undergraduate or doctoral degree in African Studies should consult the African and African American Studies (AAAS) chapter in this catalog. The Department of African and African American Studies offers a number of courses on African topics and is home to the African Language Program, which teaches 31 African languages.

The following FAS departments offer courses on Africa. A more detailed description of these courses may be found in this catalog under the appropriate department or committee heading.

Departments with Courses of Interest:

General Education
Core Curriculum
Freshman Seminars
2012-2013 Previous Courses of Instruction

African and African American Studies
Anthropology
Economics
English and American Literature and Language
Environmental Science and Public Policy
Folklore and Mythology
Government
History
History and Literature
History of Art and Architecture
History of Science
Literature and Comparative Literature
Music
Near Eastern Languages and Civilizations
Romance Languages and Literatures
Study of Religion
Social Studies
Sociology
Visual and Environmental Studies
Women, Gender, and Sexuality

In addition to the departmental offerings in the Faculty of Arts and Sciences, courses on Africa can also be found in the catalogs of the Schools of Business, Design, Divinity, Education, Government, Law, Medicine, Public Health, and the Extension School. A listing can be found in the Academics section of the Committee’s Website: www.africa.harvard.edu/academics.html.
Anthropology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Anthropology

Gary Urton, Dumbarton Oaks Professor of Pre-Columbian Studies (Chair)
Asad A. Ahmed, Associate Professor of Anthropology (on leave 2012-13)
Ofer Bar-Yosef, George Grant MacCurdy and Janet G. B. MacCurdy Professor of Prehistoric Archaeology (on leave 2012-13)
Anna Bernstein, Assistant Professor of Anthropology and of Social Studies (on leave spring term)
Theodore C. Bestor, Reischauer Institute Professor of Social Anthropology
Jennifer Lynn Carballo, College Fellow in the Department of Anthropology
David L. Carrasco, Neil L. Rudenstine Professor for the Study of Latin America in the Faculty of Divinity and the Faculty of Arts and Sciences (on leave spring term)
Lucien G. Castaing-Taylor, Professor of Visual Arts and of Anthropology (on leave 2012-13)
Steven C. Caton, Khalid Bin Abdullah Bin Abdulrahman Al Saud Professor of Contemporary Arab Studies (Director of Undergraduate Studies)
Kerry R. Chance, College Fellow in the Department of Anthropology
Jean Comaroff, Alfred North Whitehead Professor of African and African American Studies and of Anthropology
John Comaroff, Hugh K. Foster Professor of African and African American Studies and of Anthropology
William L. Fash, Bowditch Professor of Central American and Mexican Archaeology and Ethnology (on leave 2012-13)
Rowan K. Flad, Professor of Anthropology
Kathryn E. Goldfarb, Lecturer on Anthropology
Susan Greenhalgh, Professor of Anthropology
Nicholas H. Harkness, Assistant Professor of Anthropology
Michael Herzfeld, Ernest E. Monrad Professor of the Social Sciences (Director of Graduate Studies) (on leave spring term)
Edward Akintola Hubbard, College Fellow in the Department of Anthropology
Ernst Karel, Lecturer on Anthropology
Arthur Kleinman, Esther and Sidney Rabb Professor of Anthropology in the Faculty of Arts and Sciences and Professor of Medical Anthropology in the Faculty of Medicine, Harvard College Professor (on leave spring term)
C. C. Lamberg-Karlovsky, Stephen Phillips Professor of Archaeology and Ethnology
Catalina Laserna, Lecturer on Anthropology
Matthew Joseph Liebmann, Associate Professor of Anthropology
Peter Der Manuelian, Philip J. King Professor of Egyptology
Richard H. Meadow, Senior Lecturer on Anthropology
Andrea Elizabeth Murray, Lecturer on Anthropology
Jeffrey Quilter, Senior Lecturer on Anthropology
Laurence A. Ralph, Assistant Professor of African and African American Studies and Anthropology (on leave 2012-13)
Mary M. Steedly, Professor of Anthropology
Brian A. Stewart, College Fellow in the Department of Anthropology
Emily W. Stokes-Rees, Lecturer on Anthropology
Ajantha Subramanian, Professor of Anthropology
Kimberly Theidon, John L. Loeb Associate Professor of the Social Sciences
Alexandre Andreevich Tokovinine, Lecturer on Anthropology
Jason A. Ur, John L. Loeb Associate Professor of the Social Sciences

Other Faculty Offering Instruction in Anthropology

Patricia Capone
Gareth Gerard Doherty, Lecturer in Urban Planning and Design (Design School)
Alasdair Simon Donald, Instructor in Global Health and Social Medicine (Medical School)
Byron J. Good, Professor of Medical Anthropology in the Department of Social Medicine (Medical School)
Alfred F. Guzzetti, Osgood Hooker Professor of Visual Arts
Sally F. Moore, Victor S. Thomas Professor of Anthropology, Emerita
Robb Moss, Senior Lecturer on Visual and Environmental Studies
James L. Watson, John King and Wilma Cannon Fairbank Professor of Chinese Society, Emeritus

Within the Anthropology concentration, there are two principal tracks: Archaeology and Social Anthropology. For the undergraduate requirements in these programs, consult the department website, www.anthropology.fas.harvard.edu and the Undergraduate Office of the Anthropology Department.

There is also a track in biological anthropology that is supervised, along with the concentration in Human Evolutionary Biology, within the newly formed Department of Human Evolutionary Biology, as part of the Life Sciences cluster of concentrations. See www.lifesciences.fas.harvard.edu.

Department of Anthropology course listings are numerically ordered as follows:

1000-1299 and 2000-2299: Archaeology
1300-1599 and 2300-2599: Integrated courses in Archaeology and Social Anthropology
1600-1999 and 2600-2999: Social Anthropology

Archaeology
Primarily for Undergraduates

*Anthropology 91xr (formerly Anthropology 91r). Supervised Reading and Research in Archaeology
Catalog Number: 5660
Richard H. Meadow
Half course (fall term; repeated spring term). Hours to be arranged.
Special study of selected topics in archaeology, given on an individual basis and directly supervised by a member of the department. May be taken for a letter grade or pass/fail. To enroll, a student must submit a petition form (available from the Head Tutor for Archaeology or downloadable from the department’s Anthropology[Archaeology] website), signed by the adviser with whom he or she wishes to study, and a proposed plan of study.

*Anthropology 92xr (formerly Anthropology 92r). Archaeological Research Methods in Museum Collections
Catalog Number: 9029
Richard H. Meadow
Half course (fall term; repeated spring term). Hours to be arranged.
Special (individual) study of Peabody Museum (PM) collections approved by the PM Director and directly supervised by a member of the PM curatorial staff. Requires a project involving a museum collection developed in consultation with the supervisor.
Note: Must be taken for a letter grade. Priority given to students in Anthropology and related departments. To enroll, submit a petition form (available on the Anthropology [Archaeology] website), signed by the supervisor, the PM Director, and the Head Tutor for Archaeology and including a proposed research agenda, preferably during the term preceding the term of enrollment. See the Head Tutor for Archaeology or members of the Peabody Museum curatorial staff for more information.

*Anthropology 97x. Sophomore Tutorial in Archaeology
Catalog Number: 0400
Gary Urton
Half course (spring term). M., 2:45–4:45.
This course will focus on archaeological thinking, the cognitive skeleton of the discipline of archaeology, the principles and the logic that are the foundation of all archaeological conclusions and research. Central to this is an understanding of research design, archaeological theory and interpretation, culture and material culture; as well as an understanding of how to examine and construct an archaeological argument.
Note: Required of all concentrators in Archaeology.

*Anthropology 98xa. Junior Tutorial in Archaeology
Catalog Number: 2959
Richard H. Meadow
Half course (fall term). Tu., 1–3.
The junior tutorial provides a background in archaeological method and theory through critical analysis of selected issues and debates particularly focusing on more complex societies. Specific topics include the origins of agriculture and the domestication of animals, the development of
complexity and “civilization,” post-colonial and historical archaeology, and related ethical and theoretical issues. Weekly readings (drawn from current journal literature), discussions, and several short writing assignments.

Note: Required of all concentrators in Archaeology.

*Anthropology 98xb. Junior Tutorial in Archaeology*
Catalog Number: 3568
Richard H. Meadow

*Half course (spring term). Hours to be arranged.*
This individual tutorial for archaeology students intending to write a senior thesis is normally undertaken with a member of the faculty during the second term of junior year. To enroll, a student must submit a petition form (available from the Head Tutor for Archaeology, or downloadable from the department’s Anthropology [Archaeology] website) with a proposed course plan of study and the tutorial adviser’s signature.

Note: Required of candidates for honors in Archaeology.

*Anthropology 99x (formerly Anthropology 99). Thesis Tutorial in Archaeology - Senior Year*
Catalog Number: 6656
Richard H. Meadow

*Full course. Hours to be arranged.*
Research and writing of the Senior Thesis. Limited to honors candidates. Signature of the faculty adviser on a departmental form is required. This form is available from the Head Tutor for Archaeology or downloadable from the department’s Anthropology (Archaeology) website.

For Undergraduates and Graduates

**Anthropology 1010. The Fundamentals of Archaeological Methods & Reasoning**
Catalog Number: 8727 Enrollment: Limited to 150.
Rowan K. Flad and Jason A. Ur

*Half course (fall term). M., W., at 10. EXAM GROUP: 3*
A comprehensive introduction to the practice of archaeology and major themes from our human past: how do archaeologists know where to dig? How do we analyze and understand what we find? What do we know about the origins of the human species, agriculture, cities, and civilization? The course integrates methods and theory, and utilizes Peabody Museum collections, to show how we reconstruct ancient diet, trade, and political systems. We also explore the role of archaeology in colonialism, modern politics, and film.

Note: One 2 hour section per week. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Anthropology 1025r (formerly Anthropology 1025). Museum Anthropology, Thinking with Objects: Kayaks: Seminar**
Catalog Number: 48543 Enrollment: Limited to 15.
Patricia Capone
Half course (spring term). Tu., 2:30–4:30. EXAM GROUP: 16, 17, 18
By considering early Peabody Museum kayak collections from Alaska, students will explore the history of anthropology and museum collecting, representation of indigenous people in museum display, and modern stewardship of museum collections. Students will take part in a conservation and exhibition consultation project between the Peabody Museum and Alaska Native consultants. Students will utilize knowledge gained from the consultations, readings, and demonstrations to contribute to synthesize and further the modern conservation and exhibition of kayaks and co-development of knowledge related to Peabody Museum collections.

Anthropology 1032. The Dawn of Mesoamerican Civilization - (New Course)
Catalog Number: 29337
Jennifer Lynn Carballo
Half course (spring term). Tu., Th., at 10. EXAM GROUP: 12
This course surveys the archaeology of Formative Mesoamerica, providing an overview of prehispanic civilizations in Mexico, Guatemala, and neighboring countries, from the earliest evidence for human occupation to the appearance of the first cities and states in the region (by around AD 100). Topics include the origins of agriculture, early villages, sociopolitical organization, ritual practices, creation of inequality, and the development of chiefly societies, with a focus on the Southern Gulf Coast (Olmec), the Valley of Oaxaca, Central Mexico, Soconusco Coast, and the Maya area. Peabody Museum collections are incorporated into class discussions and assignments.

Anthropology 1035. Human Roots: Paleolithic Archaeology of the Old World - (New Course)
Catalog Number: 20555
Brian A. Stewart
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Through selected topics, this course surveys the world’s longest archaeological record — that of the Old World Paleolithic. A series of introductory lectures provide the theoretical, chronological and climatic frameworks for the course, which begins with the earliest evidence of stone tool manufacture at 2.6 million years ago. Topics include earliest Homo life-ways in Africa; the initial colonization of Eurasia; Middle Pleistocene hominin diversification; major technological innovations like fire, projectiles and ceramics; the archaeology of modern human origins in Africa; modern human dispersals into India, Arabia, Southeast Asia, Australia and Europe; Neanderthal-modern human interactions; and strategies for coping with climate change.

Anthropology 1045. Ancient Settlement Systems: Seminar
Catalog Number: 8978
Jason A. Ur
Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17
Approaches to spatial patterning in human societies, including the structure of settlements and the regional distribution of populations. The seminar will consider how variation in settlement and settlement systems can be related to factors such as environment, economy, and social and political organization. Case studies will be drawn from a range of New and Old World societies of varying scales of sociopolitical complexity.
Anthropology 1060. Archaeological Science  
Catalog Number: 2013  
Richard H. Meadow  
Half course (spring term). M., 7-10 pm. EXAM GROUP: 9  
Focus on physical science and engineering methods and techniques used by archaeologists in the reconstruction of time, space, and human paleoecology, and analysis of archaeological materials. Topics include 14C dating, ice core and palynological analysis, stable isotope chemistry of paleodietary foodwebs, soil micromorphology and site formation, Pb isotope sourcing of metal artifacts, and microstructural and mechanical analyses of cementitious materials used in ancient monumental buildings.  
Note: Meets at MIT.  
Prerequisite: One year of college-level chemistry or physics.

Anthropology 1065. The Ancient Near East  
Catalog Number: 28632  
C. C. Lamberg-Karlovsky  
Half course (fall term). Tu., Th., at 10. EXAM GROUP: 12  
From the earliest urban and literate civilizations to the formation of empire we shall review the political, economic, and religious beliefs of the Sumerians, Babylonians, and Egyptians. These early civilizations will then be discussed in the context of the first internationalism that brought them into contact with their near and distant neighbors from eastern Europe to Central Asia, Africa, and South Asia. The political use of the past by modern nation states will be reviewed.

Anthropology 1080. North American Archaeology: Lost Tribes and Ancient Capitals of North America  
Catalog Number: 5190  
Matthew Joseph Liebmann  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
Archaeology of Native North America, from the first appearance of humans on the continent to the arrival of Europeans in the 1500s. Topics to be covered include: history of the discipline; megafaunal extinctions; Archaic deep-sea fishers in the Northeast; buffalo hunters on the Northern Plains; origins of agriculture; moundbuilding cultures of the Midwest; Pueblo peoples of the Southwest; complex foragers of the Northwest coast; dynamic contact period interactions; and current political debates and ethical issues relating to the archaeology of North America.  
Note: Expected to be given in 2013–14.

Anthropology 1085. Six Great Discoveries in New World Archaeology  
Catalog Number: 2318  
Jeffrey Quilter  
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
The class will use six important archaeological sites as case studies by which to understand prehistory in the Ancient Americas and to learn of changing approaches to studying the past. From three major culture regions, two sites important for specialists and a wider audience will be examined in depth. They are North America: Cahokia and Chaco Canyon; Mesoamerica: Teotihuacan and Copan; and Central Andes: Moche Huacas and Cuzco-Machu Picchu.
Note: Expected to be given in 2013–14. Class designed primarily for undergraduates with no previous experience in archaeology but it may also be taken by graduate students.

**Anthropology 1090. Ethnography and Archaeology**  
Catalog Number: 8716  
Gary Urton  
*Half course (fall term). M., 3–5. EXAM GROUP: 8, 9*  
Archaeologists often draw on ethnographic studies of Western and non-Western societies as sources of explanation for ancient cultural practices. But the questions remain: how valid is the use of ethnographic analogy in the study of the past? What assumptions do archaeologists make about past social processes in their uses of ethnographic studies? These are some of the questions addressed in this course.  
*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**Anthropology 1095 (formerly Social Analysis 50). Urban Revolutions: Archaeology and the Investigation of Early States**  
Catalog Number: 4409  
C. C. Lamberg-Karlovsky  
*Half course (spring term). Tu., Th., at 10, and a 90-minute weekly section to be arranged. EXAM GROUP: 12*  
Examines the development and structure of the earliest state-level societies in the ancient world. Archaeological approaches are used to analyze the major factors behind the processes of urbanization and state formation in Mesopotamia, Egypt, Central Asia, the Indus Valley, and Mesoamerica. The environmental background as well as the social, political, and economic characteristics of each civilization are compared to understand the varied forces that were involved in the transitions from village to urbanized life. Discussion sections utilize archaeological materials from the Peabody Museum and Semitic Museum collections to study the archaeological methods used in the class.  
*Note:* No previous knowledge of archaeology is necessary. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**Anthropology 1125. The Moche of Ancient Peru: Politics, Economy, Religion and Art**  
Catalog Number: 0593  
Jeffrey Quilter  
*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7*  
This course will be a focused examination of the ancient Moche (ca. C.E. 100-800) of the north coast of Peru with particular attention paid to the nature of Moche political economy and its religious-ceremonial-artistic manifestations.  
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts B, but not both.
[Anthropology 1130. Archaeology of Harvard Yard]
Catalog Number: 1634
Patricia Capone, Christina Jayne Hodge, and Diana Loren
Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17
Archaeological data recovered from Harvard Yard provide a richer and more nuanced view of the 17th through 19th century lives of students and faculty in Harvard Yard, an area that includes the Old College and Harvard Indian College. Students will excavate in Harvard Yard, process and analyze artifacts, and report on the results. Additional topics to be covered include regional historical archaeology, research design, surveying, archival research, stratigraphy, and artifact analysis.
Note: Expected to be given in 2013–14.

[Anthropology 1131. Archaeology of Harvard Yard II: Laboratory Methods and Analysis]
Catalog Number: 0655
Diana Loren and Christina Jayne Hodge
Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17
Open to students who participated in the fall term investigations in Harvard Yard, this course focuses on the detailed analysis of the materials recovered in the excavations, within the context of archival and comparative archaeological and historical research. The analysis will also include an evaluation of the results of the ground-penetrating radar surveys conducted prior to the excavations, as part of the research design for the next season of investigations of the Indian College site.
Note: Expected to be given in 2013–14.
Prerequisite: Anthropology 1130, Archaeology of Harvard Yard.

[Anthropology 1150. Ancient Landscapes]
Catalog Number: 4736
Jason A. Ur
Half course (fall term). Th., 3–6. EXAM GROUP: 17, 18
Archaeological approaches to settlement and land use at the regional scale. Issues will include settlement systems, agricultural and pastoral systems, the role of humans environmental change, and also the methods used to investigate them.
Note: Expected to be given in 2013–14.

Anthropology 1155. Before Baghdad: Cities of Ancient Mesopotamia
Catalog Number: 8450
Jason A. Ur
Half course (spring term). M., W., at 10. EXAM GROUP: 3
The world’s first cities emerged in Mesopotamia and were the defining characteristic of ancient civilizations in what is today Iraq, Syria, and Turkey. They were inhabited by large populations, powerful kings, and the gods themselves. The course will consider the origins, ecology, spacial arrangement, socioeconomic religious organization, religious institutions, and collapse of cities from Gilgamesh to Saddam. Through archaeology and ancient texts, students will become familiar with cities such as Uruk, Babylon, Nineveh, and Baghdad.
Anthropology 1158. Maya Narratives: Gods, Lords, and Courts
Catalog Number: 86159
Alexandre Andreevich Tokovinine
Half course (fall term). M., W., at 11. EXAM GROUP: 4
This course explores the continuing investigation of Classic Maya texts and images, and how new decipherments have changed our understanding of the ancient Maya world. The Classic Maya are the only Pre-Columbian civilization with a substantial corpus of inscriptions produced well before any contact with the Old World. Maya written and visual narratives reveal details of history and myth, life at the courts of lords and nobles, and religion and worldview. Their testimonies are often striking, unique, and hard to understand, but they are not mediated by non-indigenous interpreters and open a window into a world long gone.
Note: Expected to be given in 2013–14.

Anthropology 1165. Digging the Glyphs: Adventures in Decipherment
Catalog Number: 9906
Alexandre Andreevich Tokovinine
Half course (fall term). M., W., at 1. EXAM GROUP: 6
This course focuses on the method and theory of decipherment, but also considers epistemology and the significance and enduring relevance of ancient writing systems in the modern era. It begins with the distinction between notational, iconographic and phonetic communication—only the latter can truly be considered ‘writing’ (a linear, graphic record of speech)—and then discusses the various different types of writing systems (including logographic, logosyllabic, syllabic and alphabetic scripts). This is followed by several case studies: the great decipherments (Egyptian, the Cuneiform scripts, Linear B and Mayan); scripts whose languages have become extinct (Etruscan and Meroïtic); scripts that remain entirely mysterious (the scripts of Phaistos, the Indus Valley and Easter Island); the major scripts of the Pre-Columbian New World (Zapotec, Isthmian and Aztec writing); and invented scripts from popular literature. Each provides its own unique insights into the enduring and engaging mystery of writing.

Anthropology 1166. Amerindian Languages and Literatures
Catalog Number: 21112
Alexandre Andreevich Tokovinine
Half course (fall term). Tu., Th., at 1. EXAM GROUP: 15
This course surveys the indigenous literatures (both Pre-Columbian and Colonial) of several New World civilizations (the Aztecs, Inka and Maya) from a comparative anthropological perspective. Included are brief introductions to the languages of these early documents (Nahuatl, Quechua and Mayan), as well as a discussion of their literary conventions, contents, and significance for an understanding of the cultures that produced them. A particular focus will be on the diachronic changes in these literatures since Precolumbian times, indicative of the complex and contested landscape of Spanish Colonization.
Note: Expected to be given in 2014–15.

Anthropology 1167. Colonial and Modern Ch’olan Literatures - (New Course)
Catalog Number: 53933
Alexandre Andreevich Tokovinine
Half course (fall term). Th., 3–6. EXAM GROUP: 17, 18
This course centers on three Cho’lan languages and associated body of literary works that may be of interest to students in anthropology, linguistics, comparative literatures, and history. Even though Ch’olan languages, particularly Ch’olti’ and Ch’orti’, have been crucial for the continuing decipherment of ancient Maya writing, they remain understudied and underpublished. The course will be based on a series of recent publications on Ch’olti’, an extinct Ch’olan language, and modern Ch’orti’, its closest surviving relative. While some classes will be devoted to the grammar, vocabulary, and literary tradition of Ch’orti’ as spoken today, other sections of the course will introduce the fundamentals of Colonial Ch’olti’ and Chontal grammars (which are broadly similar to Ch’orti’ but diverge on several important issues) and then proceed to explore Moran’s manuscript, the only surviving Ch’olti’ text, and the Maldonado-Paxbolon Papers, a highly important source on Chontal Maya history and literature and one of the few surviving Maya documents detailing events immediately before and after the Spanish conquest.

**[Anthropology 1168. Introduction to Classic Maya Writing and Art]**
Catalog Number: 71052  
Alexandre Andreevich Tokovinine  
Half course (fall term). Tu., Th., at 10. EXAM GROUP: 12  
This course offers an introduction to the written and visual tradition of the Late Classic Maya of Mexico and Central America (A.D. 600-900). The main goal is to master the basics of Classic Maya hieroglyphs and iconography, explore the connections between the written and visual languages, and to review several key topics in the study of Maya inscriptions and art. The course combines theoretical discussions with "hands on" training in epigraphy and iconography.  
*Note:* Expected to be given in 2014–15.

**[Anthropology 1170. Mesoamerican Writing Systems ]**
Catalog Number: 3706  
Alexandre Andreevich Tokovinine  
Half course (fall term). M., W., at 1. EXAM GROUP: 6  
This course explores the role of writing broadly defined in the social, political, and religious fabric of ancient civilizations of Mexico, Guatemala, Belize, and Honduras. This region known as Mesoamerica is characterized by an amazing variety of indigenous writing systems, from phonetic ones like Maya hieroglyphs, to largely pictographic notations such as Mixtec records. The course offers a survey of Mesoamerican writing systems that centers on the basic properties of the scripts and their uses. It highlights how specific features of Mesoamerican writing systems reflect broader regional traditions with respect to the role of writing in social, political, and religious life.  
*Note:* Expected to be given in 2013–14.

**[Anthropology 1175. The Archaeology of Ethnicity]**
Catalog Number: 1022  
Gary Urton  
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7  
Ethnic identity and conflict are among the most powerful processes and relations shaping the world we live in today. Questions addressed include: What can we understand about ethnic identity and relations in the prehistoric world on the basis of the archaeological record? For example, how might differences in material culture represent and reflect markers of ethnic
identity? The Peabody Museum collections will provide materials for study and analysis. 
*Note:* Expected to be given in 2013–14.

**Anthropology 1190. Encountering the Conquistadors**  
Catalog Number: 9956  
Matthew Joseph Liebmann  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
This course examines the effects of the Spanish Conquest on indigenous peoples of the Americas between the fifteenth and eighteenth centuries, providing an introduction to the archaeology of first encounters in the Caribbean, Southeast and Southwest US, Central Mexico, highland and lowland Mesoamerica, the Amazon basin, and in the Andes. Topics addressed include the roles of disease, indigenous politics, native rebellions, and ecological change in the colonization of the ‘New’ World.

*[Anthropology 1210. The Archaeology of Ancient China]*  
Catalog Number: 1793  
Rowan K. Flad  
*Half course (spring term). M., W., at 10. EXAM GROUP: 3*  
A survey of the archaeology of China from the origins of humans during the Palaeolithic into the Bronze Age (ca. 220 BCE), with an emphasis on the origins of agriculture and the emergence of complex society during the late Neolithic and Early Bronze Age. We survey important archaeological finds from these periods and examine relevant issues in anthropological archaeology. Sections will involve the discussion and use of materials from the Peabody and Sackler Museums.  
*Note:* Expected to be given in 2014–15.

**Anthropology 1214. The Archaeology of Women and Children - (New Course)**  
Catalog Number: 54265  
Jennifer Lynn Carballo  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
This course explores approaches to gender and family life in anthropological and archaeological research, by comparing data from a variety of ancient societies. We consider relationships between men, women, and children in the past, as well as how contemporary gender relations have influenced the practice of archaeology and our interpretation of the past. How can we recognize gender archaeologically? In what ways did ancient women and children contribute to subsistence, technology, political life, ritual activities, and more? Peabody Museum collections are incorporated into our methodological and theoretical study of gender in archaeology.

**Anthropology 1250. The Pyramids of Giza: Technology, Archaeology, History: Seminar**  
Catalog Number: 48924  
Peter Der Manuelian  
*Half course (spring term). M., W., at 11, with occasional sections and field trips to be arranged. EXAM GROUP: 4*  
Focuses on the Pyramids, Sphinx, and tombs at Giza (ca. 2500 BC), in the context of ancient Egyptian history, art, and archaeology. The HU-MFA Expedition excavated Giza, resulting in today’s Giza Project at Harvard. Seminar takes place in Harvard’s Visualization Center with 3D
viewing of the Giza Necropolis on a 23-foot screen, and consists of introductory lectures, student presentations, and field trips. Topics range from challenges of archaeological information processing to Old Kingdom mortuary art and architecture, to issues of ownership and repatriation. Students will also contribute to the (real world) Giza Project at Harvard.

**Primarily for Graduates**

**Anthropology 2000. Osteoarchaeology Lab**
Catalog Number: 0363 Enrollment: Limited to 12.
Richard H. Meadow
Half course (fall term). W., 2:30-5:30, and at least three hours of laboratory weekly. EXAM GROUP: 7, 8, 9
Introduction to the osteoarchaeological analysis. Identification of animal bones and teeth from archaeological sites using comparative materials and their characterization employing visual, metric, and microscopic methods.
*Note:* Given in alternate years. Open to qualified undergraduates. Fulfills laboratory course requirement for archaeology graduate students and archaeological science requirement for undergraduate concentrators.

**Anthropology 2010ar. Materials in Ancient Societies: Metals**
Catalog Number: 7163 Enrollment: Online CMRAE Lab pre-registration required by August 17, 2012
C. C. Lamberg-Karlovsky
Half course (fall term). Hours to be arranged.
This seminar-laboratory subject provides in-depth study of the technologies of ancient societies.
*Note:* Open to senior undergraduates with permission of instructor.

**Anthropology 2010br. Materials in Ancient Societies: Metals**
Catalog Number: 1753
C. C. Lamberg-Karlovsky
Half course (spring term). Hours to be arranged.
This seminar-laboratory subject provides in-depth study of the technologies of ancient societies.
*Note:* Anthropology 2010ar is commonly taken before Anthropology 2010br.

[*Anthropology 2020. GIS and Spatial Analysis in Archaeology*]
Catalog Number: 3729 Enrollment: Limited to 8.
Jason A. Ur
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
An introduction to the GIS and remote sensing methods used by archaeologists to document and analyze datasets at the regional scale. This class will involve the hands-on use of maps, aerial photography, satellite imagery, digital terrain models and GPS-based observations to frame and approach archaeological research questions. Labs will use sample datasets from a variety of regions but students will be responsible for assembling a GIS database for their own region of interest.
*Note:* Expected to be given in 2013–14.
Anthropology 2036. Cornerstones: Lithics in Evolutionary Contexts - (New Course)
Catalog Number: 80983
Brian A. Stewart
Half course (spring term). Th., 4–6. EXAM GROUP: 18
The importance of lithic artifacts goes far beyond their durability and consequent dominance of the prehistoric archaeological record. Stone tools were central to human evolution from their earliest appearance 2.6 million years ago until their gradual replacement in the mid-late Holocene. This graduate course explores diverse approaches to the analysis of lithic technology. Topics include the mechanics of lithic reduction; raw material procurement, variability and sourcing; technological and typological approaches to analysis; replication knapping and experimental approaches; performance characteristics and stone tool function; ground stone technologies; subsistence-settlement reconstruction; and cognitive, stylistic and ideological inferences.
Note: The course will involve weekly sections that, depending on the week, will either take the form of seminars or labs. The course will also involve experimental flintknapping.

[Anthropology 2062. Religions of Latin America]
Catalog Number: 60945
David L. Carrasco
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Examines the history of religions in Latin America including pre-Hispanic, colonial and contemporary mythologies, ritual practices and symbols integrating archaeological, artistic, documentary, and ethnographic source materials. Topics to be investigated include cosmology and worldview, ritual violence and sacred landscapes, saints and shamanism, miracles and religious healing, indigenous ancestor worship and African diasporic devotions, goddesses and women’s roles, liberation theology and Latino/a religious themes.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3705.

[Anthropology 2065. Complex Societies of Northern Mesopotamia]
Catalog Number: 6426
Jason A. Ur
This seminar will investigate themes in recent research on complex societies of northern Mesopotamia from the end of the fifth to the middle of the first millennium BC.
Note: Expected to be given in 2013–14.

[*Anthropology 2070a. Archaeological Method and Theory: Seminar]*
Catalog Number: 4634
Matthew Joseph Liebmann
Half course (fall term). M 2–5. EXAM GROUP: 7, 8, 9
The class covers archaeological method and theory emphasizing the 1950s onwards. Large-scale trends in social theory will be balanced with attention to the ideas and writings of significant anthropologists and archaeologists.
Note: Expected to be given in 2013–14. Required of graduate students in the Archaeology Program of Anthropology; this class is designed for graduate students but enthusiastic and energetic undergraduates are most welcome.
[Anthropology 2070b. Case Studies and Research Proposal Preparation]
Catalog Number: 4238
William L. Fash
Half course (spring term). Th., 10–12. EXAM GROUP: 12, 13
Seminar for graduate students that will focus on grant and paper writing, and will also include selected case studies.
Note: Expected to be given in 2013–14. Anthropology 2070a is commonly taken before Anthropology 2070b, but is not a prerequisite. Required of students in the Archaeology Program of Anthropology; open to other graduate students and advanced undergraduates with permission of instructor.

[Anthropology 2085. Archaeology of Ritual and Religion]
Catalog Number: 72634
Rowan K. Flad and Matthew Joseph Liebmann
Half course (spring term). W., 2–5. EXAM GROUP: 7, 8, 9
Graduate seminar exploring ritual and religious practices in archaeological contexts. Topics to be covered include anthropological perspectives on religion; origins of religion; religion and political economy; burial practices; materiality in/of ritual practice; and revitalization movements.
Note: Expected to be given in 2014–15.

[Anthropology 2090. Economic Archaeology: Culture Contact]
Catalog Number: 4951
Rowan K. Flad
Half course (spring term). M., 1–4. EXAM GROUP: 6, 7, 8
A seminar on economic archaeology focused on culture contact. Topics include trade (particularly trade diasporas), world-systems, ethnicity, shared material culture, and regional religious traditions.
Note: Expected to be given in 2014–15.

[Anthropology 2092. Early China: Archaeology and Texts]
Catalog Number: 9379
Rowan K. Flad and Michael J. Puett
Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17
A comprehensive introduction to Bronze Age China focusing on both archaeological discoveries from the second and first millennia and textual material including oracle bones, bronze inscriptions, excavated texts, and traditional accounts.

[Anthropology 2177 (formerly Anthropology 1177). South American Archaeology]
Catalog Number: 60232
Gary Urton
Half course (fall term). Tu., 11–1. EXAM GROUP: 13, 14
Provides an overview of Pre-Columbian civilizations on the continent of South America from the earliest record of human habitation to the time of the European invasion, in the sixteenth century. Focuses on the archaeology of the Amazon and Orinoco rivers, the Andes, and the Pacific coast.
of Peru and Chile. Extensive use will be made of the South American collections in the Peabody Museum.

*Note:* Expected to be given in 2013–14.

**Anthropology 2210. Archaeology and the Ancient Economy**

Catalog Number: 3586

*C. C. Lamberg-Karlovsky*

*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*

Numerous theories are advanced for the structure of the ancient economy. Different perspectives on the nature of trade, the market, reciprocity-redistribution, etc. will be reviewed. An evolutionary and global perspective will be pursued from the Neolithic to the Iron Age.

*Note:* Expected to be given in 2013–14. Open to undergraduates.

**Anthropology 2240. Archaeology of Production: Seminar**

Catalog Number: 8589

*Rowan K. Flad*

*Half course (spring term). W., 2–5. EXAM GROUP: 7, 8, 9*

An exploration of production in archaeological contexts. Topics include specialization, craft production, production and power, the practice/performance of production, production and gender, ritualized production, and the production of memory.

**Anthropology 2250a. Proseminar in Archaeology**

Catalog Number: 79363

*Rowan K. Flad and Brian Stewart*

*Half course (fall term). Th., 12–3. EXAM GROUP: 14, 15, 16*

This graduate seminar reviews critical issues in archaeological approaches to small-scale societies, including methods and interpretations relating to the study of mobility, sedentism, seasonality, plant and animal exploitation, and migration.

**Anthropology 2250b. Proseminar in Archaeology**

Catalog Number: 64588

*C. C. Lamberg-Karlovsky*

*Half course (fall term). W., 3–6. EXAM GROUP: 8, 9*

This graduate seminar reviews critical issues in archaeological approaches to the study of complex societies, including writing, trade, craft specialization, technology, landscape, urbanism, and political organization.

*Note:* Expected to be given in 2013–14.

**Archaeology Cross-listed Courses**

[Ancient Near East 155r. Ancient Mesopotamia: Archaeology and Texts]

*Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes—Culture, History, and Beliefs in Andean South America*

*Egyptian Aa. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs I*

*Egyptian Ab. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs II*

[*Egyptian 150. Voices from the Nile: Ancient Egyptian Literature in Translation]
*Egyptian 300. Reading and Research in Egyptology
*Freshman Seminar 30g. Digging Up the Past: Harvard and Egyptian Archaeology - (New Course)
*Freshman Seminar 44j. The Aztecs and Maya: 2012 and Beyond
Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!
Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt
Societies of the World 40 (formerly Anthropology 1174). The Incas: The Last Great Empire of Pre-Columbian South America

Integrated courses in Archaeology and Social Anthropology

For Undergraduates and Graduates

[Anthropology 1400. Quests for Wisdom: Religious, Moral and Aesthetic Experiences in the Art of Living] - (New Course)
Catalog Number: 53142 Enrollment: Open to graduates and undergraduates.
Arthur Kleinman and David L. Carrasco
Half course (fall term). Hours to be arranged.
New interdisciplinary curriculum centered on 5 kinds of quests for wisdom that involve moral, religious and aesthetic pursuits and that focus on practices of mentoring and caregiving. Students will engage in short lectures, interactive discussions, student led seminars, and music and film. Outside of classroom there will be shadowing of clinicians and religionists as well as home caregiving in the community. Students’ required projects include a personal story that narrates an experience in the art of living and writing assignments that focus on assisting experiences of others.
Note: Expected to be given in 2013–14.

Anthropology 1492. Anthropology in/of the Museum - (New Course)
Catalog Number: 91392 Enrollment: Limited to 15.
Emily W. Stokes-Rees
Half course (spring term). Th., 3–5:30. EXAM GROUP: 17, 18
This research seminar addresses museums around the globe as a window through which to consider broad issues in anthropology and museology. Thinking critically about museum objects, exhibitions, and practices, students will explore the history of museums and collecting, changing exhibit styles, museum ethics, and contemporary challenges to traditional museum practices. The format of the course will primarily involve class discussions (informed by required readings) and many sessions will also involve visits to different galleries in Harvard’s many museums, including hands-on experiences with collections, and visits to exhibition galleries, object storage, conservation, design, and other departments.
Note: Open to graduate students and upperclassmen with appropriate background in anthropology theory and/or museums.
Prerequisite: Some general theoretical background in Anthropology and/or Museums.

Anthropology 1495. The Materiality of Culture: objects, meaning, the self - (New Course)
Catalog Number: 43639 Enrollment: Limited to 20.
Emily W. Stokes-Rees
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
This seminar course explores the relationships between people and things, providing students with an overview of the developing theories and methods of material anthropology. From archaeology to material culture studies, and from art and architecture to museum interpretation, we will examine a wide variety of approaches to the world of objects, artifacts and mass-produced goods, developing critical methods for analyzing material culture and engaging objects as valuable research materials for scholarly work. Through selected readings, site visits, and group activities, we will identify methods for integrating artifacts, collectibles, and every day things with documentary research in narrating and exhibiting culture.

Primarily for Graduates

[Anthropology 2412. The Anthropology of Climate Change] - (New Course)
Catalog Number: 68249
Jeffrey Quilter
Half course (spring term). M., 2–5. EXAM GROUP: 7, 8, 9
This course covers how Anthropology has investigated the issue of climate change and the degree to which we can understand how climate changes have affected human behavior, or not, in past and recent times. An overview of the history of how climate has entered Anthropological discourses and how they link to discussions in other disciplines will be followed by the development of individual student projects and presentations. The course is specifically designed to explore the tensions between scientific and humanistic approaches in the degree to which climate may influence long-term social, political, and culture change.
Note: Expected to be given in 2013–14.

Social Anthropology

Primarily for Undergraduates

Anthropology 91zr (formerly Anthropology 91r). Supervised Reading and Research and Research in Social Anthropology
Catalog Number: 3619
Steven C. Caton
Half course (fall term; repeated spring term). Hours to be arranged.
Special study of selected topics in Anthropology, given on an individual basis and directly supervised by a member of the Department. May be taken for a letter grade or Pass/Fail. To enroll, a student must submit to the Anthropology Undergraduate Office, William James 352, a course form signed by the adviser under whom s/he wishes to study and a proposed plan of study. Anthro 91zr form available from the Undergrad Office, or the department website.

Anthropology 92zr (formerly Anthropology 92r). Social Anthropology Research Methods in Museum Collections
Catalog Number: 4742
Steven C. Caton
Half course (fall term; repeated spring term). Hours to be arranged.
Special (individual) study of Peabody Museum collections directly supervised by a faculty
member and a member of the curatorial staff. Requires a project involving a Harvard Museum collection, developed in consultation with the supervisors.  

**Note:** Must be taken for a letter grade. Priority given to students in Anthropology and related departments. To enroll, submit a petition form (available from the Undergraduate Office, William James 352), signed by both supervisors, a proposed research agenda, during the term preceding the term of enrollment. Information sheets with Museum contacts available in William James 352.

**Anthropology 97z. Sophomore Tutorial in Social Anthropology**  
Catalog Number: 5832  
**Kimberly Theidon**  
*Half course (spring term). W., 11:30–1.*  
The sophomore tutorial provides an in-depth exploration and critique of major theoretical approaches in social and cultural anthropology, the historical context of their emergence, and their contribution and relation to the discipline as a whole. Seminar members will have a chance to read and discuss selected works by key theorists, and to see how their ideas have shaped ethnographic description and analysis.  

**Note:** Required of all concentrators.

**Anthropology 98za (formerly Anthropology 98z). Junior Tutorial in Social Anthropology**  
Catalog Number: 4503  
**Steven C. Caton**  
*Half course (fall term). Hours to be arranged.*  
Junior tutorials in Social Anthropology explore critical theoretical issues related to a single ethnographic region (e.g., South Asia, Africa, Latin America). The issues and areas change from year to year, but the purpose remains the same: to give students a chance to grapple with advanced readings and to experience the ways that ideas and theories can be applied and critically analyzed in ethnographic studies.

**Anthropology 98zb. Junior Tutorial for thesis writers in Social Anthropology**  
Catalog Number: 35711  
**Steven C. Caton**  
*Half course (spring term). Hours to be arranged.*  
This individual tutorial is for social anthropology students intending to write a senior thesis, and is normally undertaken with an advanced graduate student during the second term of junior year. Students will have weekly meetings with the project advisor for the purposes of developing the appropriate background research on theoretical, thematic, regional, and methodological literature relevant to their thesis topic, and fully refining their summer research proposal. The tutorial’s final paper will be comprised of a research proposal representing the research undertaken during the semester.  

**Note:** Strongly recommended for any social anthropology junior intending to write a senior thesis. Taken in addition to the required fall term group junior tutorial, Anthropology 98za (formerly 98z).

**Anthropology 99z. Thesis Tutorial in Social Anthropology - Senior Year**  
Catalog Number: 0787
Steven C. Caton

Full course. Hours to be arranged.
Research and writing of the Senior Thesis. Limited to honors candidates.

For Undergraduates and Graduates

**Anthropology 1600. The Ethnographic Encounter: An Introduction to Social Anthropology**
Catalog Number: 8296
Steven C. Caton

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
This course is a critical introduction to the premises, vocabulary, and methods of the anthropological dialogue with people of other cultures. Lectures and discussions revolve around several themes central to the discipline, such as "cultural relativism," "social structure," "interpretation," "gender," "the invention of tradition," and "reflexivity." At the same time, we will seek some fair-minded insights into the collective lives of people who work, play, fight, speak, eat and pray in ways different from our own. In the end, we will see ourselves more clearly and fairly as well.

*Note:* Open to freshmen. This course may fulfill the ‘Entry Course’ requirement for Social Anthropology.

*Anthropology 1610. Ethnographic Research Methods*
Catalog Number: 2622 Enrollment: Limited to 20.
Edward Akintola Hubbard

*Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18*
Introduction to methodology for contemporary ethnographic field research in anthropology. Students complete assigned and independent research projects relying on a variety of ethnographic methods, under supervision of department faculty.

*Note:* Open to undergraduates only. Preference given to anthropology concentrators.

[Anthropology 1624. The Anthropology of Politics: Power, Domination and the State]
Catalog Number: 72117
Asad A. Ahmed

*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7*
The modern state increasingly governs, regulates and intervenes in what was hitherto considered private domains of life. This course will explore how modern power is produced and exercised. However, from an anthropological perspective it will also examine other non-modern state forms. Themes that will be considered in class include power, domination, resistance, and the shifting relationship between public and private.

*Note:* Expected to be given in 2013–14.

**Anthropology 1640. Language and Culture**
Catalog Number: 5844
Nicholas H. Harkness

*Half course (fall term). Tu., Th., at 11, with a section to be arranged. EXAM GROUP: 13*
This is a course in linguistic anthropology. We explore key theoretical issues in the semiotic anthropology of language use, focusing on communication, social (inter)action, representation,
cultural conceptualization, and language ideology. By presenting many of the most influential and innovative contributions to the study of language in culture and society—both recent and classic—the course aims to guide students in asking fundamental questions about language and communication more broadly as facts of everyday sociocultural experience.

**Note:** No previous knowledge of linguistics or of anthropology is required. This course may fulfill the ‘Entry Course’ requirement for Social Anthropology. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**Anthropology 1655. Politics of Nature**  
Catalog Number: 0710 Enrollment: Limited to 15.  
*Ajantha Subramanian*  
*Half course (fall term). W., 10–12. EXAM GROUP: 3, 4*  
Explores the intersections of ecology, history, and politics with a focus on the social construction of nature, politics of natural resource use, centrality of resource control to the consolidation of empires and nations, and the making of post-industrial natures. Some of the theoretical frameworks considered include: political ecology, Marxist geography, development anthropology, and environmental history. Some of the political trends addressed include: offshore extraction, nuclearization, legal pluralism, indigenous rights, wilderness preservation, and global environmentalism.  
**Note:** This course, when taken for a letter grade, meets the General Education requirement for Societies of the World.

*[Anthropology 1656. Anthropology of Pakistan: Beyond the Headlines : seminar]*  
Catalog Number: 16337  
*Asad A. Ahmed*  
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*  
Often described as one of the most dangerous places in the world, Pakistan has been characterized by religious militancy, global terror networks, endemic corruption, gender oppression, authoritarianism and extreme social inequality. This course will move beyond journalistic representations and provide an anthropological perspective on both the everyday and the extraordinary.  
**Note:** Expected to be given in 2013–14.

**Anthropology 1667. Africa, Modernity and Ethnography: Seminar**  
Catalog Number: 25018  
*Kerry R. Chance*  
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*  
This course examines colonialism and the dialectics of modernity on the African continent. Through classic and contemporary ethnography, we consider accounts of "traditional" African culture, especially the centrality accorded to religion, witchcraft and ritual. Rather than approaching these worlds as without history, we track their complex relations to transnational and trans-local forces to the production of new cultural schemes, forms of politics and identity. In doing so, we also attend to processes of decolonization, recent revolutions and the impact of global neoliberalism in the making of the current world order.
[Anthropology 1672. Legal Anthropology]
Catalog Number: 58953
Kimberly Theidon
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
This course introduces students to anthropological approaches to the study of law. This includes a survey of the historical development of the anthropology of law, and current research concerns in the field, including disputes and adjudication; legal institutions and practices; transitional justice; legal pluralism; and law and human rights. Using both classic and contemporary texts we explore the salience of the legal across a range of social and cultural contexts.
Note: Expected to be given in 2013–14.

[Anthropology 1682. Gangsters and Troublesome Populations]
Catalog Number: 34637
Laurence A. Ralph
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
The term "gang" has been used to describe all kinds of collectives, from well-dressed mobsters to petty criminals to juvenile delinquents. About the only thing that has remained consistent about gangs is their characterization as the internal Other. This class will investigate how the category of "the gang" serves to provoke discourses of "dangerous" subjects in urban enclaves. More broadly, we will examine the methods and means by which liberal democratic governments maintain their sovereign integrity through the containment of threatening populations.
Note: Expected to be given in 2013–14.

Anthropology 1710. Memory Politics
Catalog Number: 3793
Kimberly Theidon
Half course (fall term). Tu., Th., 11:30–1, and weekly section to be arranged. EXAM GROUP: 13, 14
An engagement with an interdisciplinary set of readings that analyze the relationship between memory and social reconciliation, and the role that theories of truth, justice, and redress play in this equation. We analyze truth commissions, forms of justice, and debates regarding reparations, and the points of conjuncture and disjuncture between national discourses and subaltern concepts of truth, justice, and reconciliation. Case studies include Rwanda, South Africa, Guatemala, Peru, and El Salvador.

[Anthropology 1713. Economic Rights and Wrongs]
Catalog Number: 91647
Kerry R. Chance
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Amid ongoing financial crisis and recent political uprisings in various parts of the globe, newly assertive groups are articulating demands for "rights" with a material premise, raising questions about democratic governance, its inclusions and exclusions today. This course discusses the "socio-economic" within a human rights paradigm, and, more broadly, through classic and contemporary social theory. We will examine current debates over socio-economic rights from housing to health to environment, and the terrain "social, economic and political" upon which
they are articulated.  
Note: Expected to be given in 2013–14.

[Anthropology 1714. Violence and Democracy: Seminar]
Catalog Number: 55232
Kerry R. Chance
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9
This course examines political violence under conditions of democratization and economic liberalization. In much of the world, pro-democracy struggles were waged and public culture forged upon the notion that popular sovereignty would diminish, if not cancel, the violent arbitrary functions of the state. While democratic transitions in the late 20th and early 21st centuries have constituted new relations between states and citizens, both locally and globally, prerogative power has not so much been destroyed as redeployed with new mechanisms of force and consent. Through contemporary political theory and ethnography, we examine distinct forms of violence that liberal democracy engenders.  
Note: Expected to be given in 2013–14.

[Anthropology 1720. Anthropology, Cultural Studies, and Film]
Catalog Number: 1522 Enrollment: Limited to 25.
Steven C. Caton
Half course (fall term). M., W., at 11; film screening: F., 5-9 pm. EXAM GROUP: 4
Focuses on feature-length commercial film (rather than ethnographic or documentary film) and some of the culture industries (Hollywood, Iran, and Egypt) that produce them, paying particular attention to the Middle East. What might an anthropology of film look like? Film theory and cultural studies will be examined for their contributions to the answer to that question. Topics include the culture industry, critical theory, the ethnographic gaze, orientalism, media studies, modernity, nationalism, and transnationalism.  
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

[Anthropology 1726. Ethnography of South Korea]
Catalog Number: 36219 Enrollment: Primarily for undergraduates. Cross-listed with East Asian Studies
Nicholas H. Harkness
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
We read full-length ethnographies of contemporary South Korea, supplemented by older ethnographic accounts, to explore major socio-cultural themes in Korean society, such as urbanization, capitalism, kinship, gender, social mobility, and political participation. Our discussions also will focus on developments in anthropological theory, types of anthropological evidence, and ethnographic methods and writing.  
Note: Expected to be given in 2013–14.

Anthropology 1732. China Through Ethnography and Film: Seminar - (New Course)
Catalog Number: 44236
Susan Greenhalgh
Half course (spring term). Th., 3–5, W., 5–8 p.m. EXAM GROUP: 9, 17, 18
The rapid rise of China on the global stage is one of the most stunning developments of our time. Under the slogan "reform and opening up" introduced in 1978, an ambitious party-state has sought to remake the economy and society so as to propel the nation to global prominence and power. How have these grand schemes of national modernization worked out? How have they reshaped China’s population, society, economy, and environment? This course draws on contemporary film and ethnography to answer these questions. Pairing films by fifth and sixth generation Chinese filmmakers (as well as some diasporic filmmakers) with ethnographic texts by contemporary anthropologists, the course seeks to discover not only how China is "going global," but also how film and ethnography differ as ways of narrating and knowing China.

**Anthropology 1733. Intimate Ethnographic Film - (New Course)**
Catalog Number: 17518 Enrollment: Limited to 7.
Michael Herzfeld  
Half course (fall term). M., 7–9 p.m. EXAM GROUP: 9  
A small studio methodology course (capped at 7 students) to explore the use of small video cameras (camcorders) and other equipment in the course of field research. Explores relationship among visual imagery, sound recording, and the social dimensions necessary to achieving cultural intimacy, as well as the relationship between image and caption/subtitle in conveying ethnographic knowledge and historical depth. Assignments include production of a short ethnographic film and a final essay.

**Anthropology 1742. Housing and Heritage: Conflicts over Urban Space**
Catalog Number: 61658  
Michael Herzfeld  
Half course (spring term). M., W., at 11. EXAM GROUP: 4  
The celebration of national and local forms of heritage often rides roughshod over the interests of the local citizenry it is intended to serve. In this course we look at how such conflicts play out in several cities - notably Athens, Bangkok, Beijing, Istanbul, Jerusalem and Rome - and address the ethical, practical, and architectural conflicts that arise from an anthropological perspective.  
*Note:* Expected to be given in 2013–14.

**Anthropology 1755 (formerly Anthropology 1755). Creole Pop Iconographies**
Catalog Number: 88786  
Edward Akintola Hubbard  
Half course (spring term). M., 4–6. EXAM GROUP: 9  
Creole is a term loosely applied to social entities (societies, persons, products) that are the result of racial, cultural and linguistic mixing of two or more distinct peoples. This course considers how creolity is mobilized in popular culture. It showcases ten pop icons from the Caribbean and Latin America, and considers how their iconic status is shaped by questions, assertions and debates that have also defined creolization as a concept in anthropology, literary theory and politics.

**Anthropology 1756. The Horror of Anthropology**
Catalog Number: 94938  
Edward Akintola Hubbard  
Half course (fall term). Tu., 3–6. EXAM GROUP: 17, 18
In this course, we will critically examine the anthropologist and ethnographic research as conventions of the horror film. With the history of anthropology as a backdrop to our ongoing viewings and discussions, we will consider the anthropologist as a liminal figure in popular culture -- a hapless intermediary between science and superstition, between modernity and arcane tradition -- who grapples methodically with both rationalist and non-rationalist epistemes. We will examine cinematic representations of ethnographic fieldwork as a terrifying, ill-advised crossing of socioeconomic, cultural, geopolitical, temporal and sexual boundaries. Films include *Ganja and Hess* (1973), *Cannibal Holocaust* (1980), *Candyman* (1992), and *The Relic* (1997).

**[Anthropology 1758. Globalization and Popular Culture]**
Catalog Number: 70339
Edward Akintola Hubbard
*Half course (fall term). M., 3–5. EXAM GROUP: 8, 9*
This course explores the mediascapes of cinema, television, music, art and design, advertising, social networking, blogging, video and audio sharing and considers their global impact on political and consumer consciousness. We survey various theoretical approaches to popular culture, including British culturalism, Frankfurt School Marxism, psychoanalysis, feminism and poststructuralism. We also examine how the globalization of media and information technologies - for instance, the fact that people across the world can now "broadcast themselves" - has radically altered the form, content and flow of pop culture.
*Note*: Expected to be given in 2013–14.

**[Anthropology 1790. Violence in the Andes: Coca, Conflict, and Control]**
Catalog Number: 2224
Kimberly Theidon
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
In this course we address the politics of coca and conflict in the Andean Region. We will trace different historical understandings of coca, ranging from the "miracle drug" to "moral panic". Our readings will allow us as to analyze the complex dynamics of coca production, counter-narcotics and counter-insurgency efforts in the Andes, moving between state and non-state actors as well as domestic and international interests. We will address the rise of indigenous movements within this context, and their potential to redefine political agendas in Colombia, Ecuador, Peru and Bolivia.
*Note*: Expected to be given in 2013–14.

**Anthropology 1795. The Politics of Language and Identity in Latin America**
Catalog Number: 7265
Catalina Laserna
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*
Introduces theory and research in linguistic anthropology in the context of ethnographic research, film and popular music, from cumbia to hip-hop in Latin America. Examines how the multiplicity and contention of language ideologies play out in the everyday practices. What are the social, linguistic and discursive means by which social identity is constructed? How do ways of speaking, such as border talk and code switching, link face to face communities to the national and transnational spheres? Texts include regional ethnographies, music and documentaries from the region as well as the literature in the burgeoning new field of linguistic anthropology.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Foreign Cultures.

**Anthropology 1808. Anthropology of Tourism: East Asia - (New Course)**
Catalog Number: 48657
Andrea Elizabeth Murray
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
This course examines the global tourism industry, with a regional emphasis on East Asia. Readings offer anthropological perspectives on: the history of tourism; cultures of consumption; authenticity and aesthetics; political economy & ecology; and the challenges of sustainable development. We will explore tourism as a feature of globalization and localization by tracking emerging Chinese markets and Japanese interpretations of "ecotourism." Students will learn how to analyze tourism marketing materials, write critical essays on tourism enterprises, recognize the social constructions and power relations embedded in "tourism products," explain dynamic travel markets, and reflect on their own role as international tourists.
Note: While there are no language requirements for this course, students with Japanese, Chinese, and/or Korean language abilities are particularly encouraged to enroll.

[Anthropology 1815. Empire, Nation, Diaspora: Asians in the U.S.]
Catalog Number: 60047
Ajantha Subramanian
Half course (fall term). Hours to be arranged.
The U.S. is commonly described as a multicultural society and Asian Americans as "model minorities" with strong group identities. But when did multiculturalism become a defining characteristic of American society? What is its relationship to race and class? Why did migrants from Asia come here and how has their reception changed over time? When do they call themselves "Asians" and when do they privilege other self-representations? We will explore these questions through history, anthropology, literature, and film.
Note: Expected to be given in 2013–14.

[Anthropology 1820. Japan in the Ethnographic Gaze: Seminar]
Catalog Number: 1267 Enrollment: Limited to 12.
Theodore C. Bestor
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
We examine ethnographies of Japan from the 1930s to the present to illuminate how Japan, as a cultural and social "whole," has been ethnographically problematized and re-problematized in different eras, from different theoretical interests such as culture-and-personality, modernization, and tradition, structuralist, post-structuralist, and cultural studies.
Note: Expected to be given in 2013–14. No prerequisites; open to all concentrators, esp. in Anthropology, East Asian Studies, and Music.

*Anthropology 1836aar (formerly *Anthropology 2835r). Sensory Ethnography I*
Catalog Number: 7583 Enrollment: Limited to 10.
Mary M. Steedly and Alfred F. Guzzetti
Full course (spring term). M., W., 1–4, W., 6–9 p.m. EXAM GROUP: 6, 7, 8, 9
First half of a year-long sequence in which students apply media anthropological theory and
conduct ethnography using film, video, sound, and/or still photography.
Note: Emphasis is on pre-production and production in the spring, and on post-production in the fall. Interview with instructor and teaching assistant required for admission.

**Anthropology 1836br (formerly *Anthropology 2836r). Sensory Ethnography II: Studio Course**
Catalog Number: 6213 Enrollment: Limited to 10.
Mary M. Steedly and Robb Moss
*Half course (fall term). M., W., 1–4. EXAM GROUP: 6, 7, 8*
Second half of a year-long sequence in which students apply media anthropological theory and conduct ethnography using film, video, sound, still photography, and/or hypermedia.
Note: Limited to graduate students, who must also attend all VES 158br classes. Emphasis is on pre-production and production in the spring, and on post-production in the fall. Interview with instructor and teaching assistant required for admission.

**Anthropology 1850. Ethnography as Practice and Genre**
Catalog Number: 1686
Mary M. Steedly
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
For sociocultural anthropologists, ethnography is both a way of studying human communities and a way of writing about them. Ethnographic fieldwork raises issues of participation, power, and perspective; cultural relativism; the nature of evidence; and the ethics of engagement. Writing ethnography highlights other issues, such as the politics of representing “others.” This course explores these and related issues through close reading and intensive discussion of selected texts.
Note: Expected to be given in 2013–14. This course fulfills the undergraduate "Methods" requirement for Social Anthropology.

**Anthropology 1875. Moving Pictures: An Anthropology of Images**
Catalog Number: 46551
Mary M. Steedly
*Half course (spring term). M., W., (F.), at 12.*
Most people today live in an environment awash with images in motion. This course explores, from an anthropological point of view, the implications of this media-saturated environment in a range of ethnographic and historical contexts. Issues to be addressed include: technologies and mediation; global and subglobal circuits of transmission; the nature of image-based publics and publicity; media temporalities; visibility, visualization and surveillance.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**Anthropology 1882. The Woman and the Body**
Catalog Number: 15985
Susan Greenhalgh
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
This course probes the culture and politics of the body in America today, stressing America’s role as a center of bodily ideals that now dominate global imaginations. Emphasizing the
intersections of gender with race/ethnicity, class, and sexuality, the course examines the diverse notions of beauty, bodily practices, and body politics embraced by American women (and, to a lesser extent, men) of different classes, ethnicities, and sexualities. It deals with critical issues facing our society in the early 21st century -- the growing prevalence of eating disorders, the normalization of cosmetic surgery, rising levels of childhood and adult obesity using contemporary theory to tease out their complex sources and effects. Lying at the intersection of the anthropology of the body, medical anthropology, and women’s/gender studies, the course outlines an important new arena for critical inquiry.

[Anthropology 1935. Secularism in Question: Seminar]
Catalog Number: 52752
Asad A. Ahmed
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Secularism, once understood as a normative political arrangement that promoted social peace and multiple religiosities, has recently been critiqued for circumscribing or denying people’s abilities to live according to their religious understandings. However, such arguments have also stimulated strident responses that re-instantiate secular values and the enlightenment critique of religion as divisive and irrational. This course will examine recent controversies in France, India, the US and Turkey that have put secularism into question.
Note: Expected to be given in 2013–14.

Anthropology 1975. Culture and Social Relations - (New Course)
Catalog Number: 22928
Nicholas H. Harkness
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
What is a social relation? This course addresses this question by combining foundational readings in social theory with contemporary ethnographies in socio-cultural anthropology. We explore the cultural dimensions of social relations through different themes, such as politics, economics, religion, ethnicity, kinship, and language.

[*Anthropology 1986. Art, Anthropology, and Aesthetics]
Catalog Number: 3844 Enrollment: Limited to 15.
Lucien G. Castaing-Taylor
Half course (spring term). F., 9–11. EXAM GROUP: 2, 3
In this seminar we shall study the warp and weft of human existence by crisscrossing between the anthropology of art and the art of anthropology. Both affinities and differences between art-making and anthropology will be considered, as well as alternative means of apprehending and expressing aesthetic and social experience cross-culturally.
Note: Expected to be given in 2013–14.

Anthropology 1994. Readings and Research in Contemporary Africa: Seminar - (New Course)
Catalog Number: 61257
Kerry R. Chance
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Readings and research in contemporary Africa
[Anthropology 1995 (formerly Social Analysis 70). Food, Culture, and Society]
Catalog Number: 3940
Theodore C. Bestor
Half course (fall term). M., W., (F.), at 12, and a weekly section to be arranged. EXAM GROUP: 5
Food is an entirely mundane but simultaneously elaborate aspect of human life, both pragmatic necessity and symbolic statement. This course examines how cultural systems of meaning and belief interact with social institutions and material reality. Lectures, films, discussions, fieldtrips, and ethnographic research assignments focus on the myriad ways in which food shapes (and reflects) identity (national, ethnic, religious, gendered, class-based), and how in turn how social institutions (from domestic units to the global food system) shape and transform food and its meanings, drawing on examples from many parts of the globe, both historically and contemporaneously.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Catalog Number: 97643
Michael Herzfeld
Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4
This ethnographic exploration of a huge Asian metropolis emphasizes the changing role of markets and temples; the impact of tourism and new transportation systems; religious doctrine and popular worship; and urban political dynamics.
Note: Expected to be given in 2013–14.

Primarily for Graduates

Anthropology 2602. Anthropology of Relatedness in East Asia - (New Course)
Catalog Number: 52706 Enrollment: Limited to 18.
Kathryn Goldfarb
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
This course, focusing on East Asia, explores the ways human relatedness is theorized by anthropologists and understood in daily practice by our anthropological subjects. Rather than taking "kinship" as a pre-given analytic category, we will approach the concept of family as emergent through culturally and historically specific practices, discursive representations, and national institutions and ideologies. How does the experience of family and relatedness in East Asia articulate with legal structures, caregiving and embodied practices, (neo)liberal state regimes, gender and sexuality, transnational migration, and new biomedical technologies? Students will apply theoretical and methodological insights from readings and class discussion to pursue a final project.
Note: Open to undergraduates.

Anthropology 2615. Meaning and Practice - (New Course)
Catalog Number: 59343
Nicholas H. Harkness
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
What is meaningful social behavior? This course explores theories of practice (and praxis) through the semiotic pragmatics of social action.

**Anthropology 2618. The Body in the Age of Obesity - (New Course)**
Catalog Number: 53474 Enrollment: Limited to 15.
Susan Greenhalgh
Half course (fall term). W., 10–12. EXAM GROUP: 3, 4
This course takes a critical, anthropological look at the nation’s cultural and political obsession with the "obesity epidemic." Placing the growing girth of Americans in historical and global context, it asks how the weighty body replaced smoking as the focus of the latest national "crisis," how the problem of "obesity" has been framed, what solutions have been put in place to address it, and with what effects for individuals and society at large. The course draws on work in many fields — from public health and the anthropologies of science and medicine; to American and fat studies; to political ecology, food systems, and food justice studies — in an effort to stimulate interdisciplinary conversations about what today’s intense focus on obese bodies means for us as human scientists and as citizens of the world.

*Anthropology 2626. Research Design*
Catalog Number: 9193 Enrollment: Limited to 12.
Theodore C. Bestor
Half course (spring term). W., 4–6. EXAM GROUP: 9
Seminar focuses on weekly writing assignments leading to complete dissertation research proposals; defining theoretical and ethnographic contexts of research problem; reviewing literature; explaining site selection, methodology, timetable, human subjects protection; preparing budget; identifying grant sources.
*Note:* By permission only. Limited to doctoral candidates, with preference given to second and third year students in Anthropology.

**Anthropology 2628. Proposal Writing - (New Course)**
Catalog Number: 32957 Enrollment: Limited to 12.
Susan Greenhalgh
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
This course is a practicum designed to help students craft effective research and grant proposals, learn how to constructively critique others’ proposals, and develop enduring collaborative relationships. The first half of the semester will focus on Wenner-Gren type proposals, the second half on proposals for the National Science Foundation and similar funders. To the extent time permits, the class will also pursue a secondary objective: imparting professional skills, primarily in the area of writing and publishing, but also in oral presentation, that will be useful to students throughout their professional lives.
*Note:* Class is open to third year (or higher) social anthropology graduate students who have done most of the background reading for a major research project and are actively working on formal research proposals. For most students this will be a proposal for their PhD dissertation research. This course is intended to follow and to build on the skills developed in Anthropology 2626 (Research Design), offered in the Spring semester.
*Prerequisite:* Anthropology 2626
[*Anthropology 2635. Image/Media/Publics: Seminar]
Catalog Number: 9515 Enrollment: Limited to 15.
Mary M. Steedly
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Explores the relations among technologies of image production and circulation, the nature and intensity of the circulating image, and the generation of publics and counter-publics. Questions of scale, mediation, publicity, and mobilization will be considered.
Note: Expected to be given in 2013–14. Open to advanced undergraduates with permission of instructor.

[Anthropology 2638. Political Anthropology of Colonial and Postcolonial South Asia]
Catalog Number: 67859
Asad A. Ahmed
Half course (fall term). W., 4–6. EXAM GROUP: 9
This course explores conceptual understandings of politics and the political as-well as the practice of formal and informal politics in South Asia. Formal politics is criticized by moral and cultural discourses from liberal and religious perspectives, which mark it as corrupt. Can we think of politics as having promise and possibilities in addition to perils? We begin by examining a variety of discourses to see how politics is conceptualized before moving to diverse sites to examine its practice. In particular we look at political parties as organizations where many of these tensions are expressed and managed.
Note: Expected to be given in 2013–14.

[Anthropology 2642. Anthropology of Moralities] - (New Course)
Catalog Number: 89557
Kimberly Theidon
Half course (fall term). Hours to be arranged.
This course draws upon an interdisciplinary set of readings, both theoretical and empirical, to explore a genealogy of moral questions within the fields of moral philosophy and anthropology. We will explore the formation of ethical subjects and subjectivities, as well as the construction of moral economies, communities and their limits.
Note: Expected to be given in 2013–14.

[Anthropology 2645. Reconfiguring Regimes: Power, Law and Governance]
Catalog Number: 9925
Kimberly Theidon
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Studies changing concepts of law, power and governance within contemporary global politics. Combines theoretical readings with ethnographic inquiries of the state, the legal, the magical, and the just.
Note: Expected to be given in 2013–14.

*Anthropology 2650a. History and Theory of Social Anthropology: Proseminar
Catalog Number: 1752
Steven C. Caton
Half course (fall term). W., 5–8 p.m. EXAM GROUP: 9
A critical review of the major theoretical approaches in social anthropology. 

Note: In conjunction with Anthropology 2840 in 2009-10, required of candidates for the PhD in Social Anthropology. Limited to, and aimed at, doctoral candidates. Not open to undergraduates.

*Anthropology 2650b. History and Theory of Social Anthropology: Proseminar*

Catalog Number: 7971

Ajantha Subramanian

Half course (spring term). Tu., 10–1. EXAM GROUP: 12, 13, 14

Continuation of Anthropology 2650a.

Note: Required of candidates for the PhD in Social Anthropology. Not open to undergraduates.

[Anthropology 2652. Psychological Anthropology]

Catalog Number: 22538

Kimberly Theidon

Half course (spring term). W., 1–3. EXAM GROUP: 6, 7

This course explores the historical development of psychological anthropology. We will read classic texts in the field, and then turn to current debates regarding emotions, mental illness, violence and its legacies, perpetrator motivations and victimhood.

Note: Expected to be given in 2013–14.

[Anthropology 2660. The Anthropology of Knowledge: Seminar]

Catalog Number: 7070

Michael Herzfeld

Half course (fall term). M., 1–3. EXAM GROUP: 6, 7

Comparative exploration of local epistemologies from craft apprentices and skilled manual workers to schoolchildren, journalists and scientists, emphasizing the embodiment, inculcation, and transmission of practical knowledge and the relationships among cosmology, social context, and pragmatic understanding.

Note: Expected to be given in 2013–14.

[Anthropology 2674. Legal Anthropology and Modern Governance]

Catalog Number: 82966

Asad A. Ahmed

Half course (spring term). W., 4–6. EXAM GROUP: 9

This course is split into two parts. The first part introduces classic themes and texts in legal anthropology and the second part examines debates on the expansion of law as a means of modern governance.

Note: Expected to be given in 2013–14.

*Anthropology 2682. Anthropology of Urbanism: Japan in Comparative Perspective - (New Course)*

Catalog Number: 95848

Theodore C. Bestor

Half course (spring term). M., W., F., at 1 and section to be arranged. EXAM GROUP: 6

This course examines patterns of Japanese urbanism -- social, cultural, historical, and built-environmental -- through interdisciplinary discussion. It is open to graduate students in any
department or programs. Students are required to attend lectures of SW 33 Tokyo; students in Anthro 2682 will participate in specialized discussion sections and will frame term projects tailored to their future research plans in close consultation with the professor. The seminar is equally open to graduate students with strong interests in urban anthropology, in urban design and planning, and in Japanese/Asian Studies in history, the social sciences, and the humanities. 

Note: Students must also attend all lectures of Societies of the World 33 "Tokyo" MW(F) 1 pm.

**Anthropology 2688. The Frankfurt School, Film, and Popular Culture**
Catalog Number: 1182 Enrollment: Limited to 15.
*Steven C. Caton*

*Half course (spring term). Th., 4–6. EXAM GROUP: 18*
Focus in the Frankfurt School and such concepts as the culture industry, critical theory and research, art and mass media reproduction, negative dialective, public sphere, and other of its contributions to social and aesthetic theory.

**Anthropology 2695. Design Anthropology: Objects, Landscapes, Cities**
Catalog Number: 39129 Enrollment: Limited to 16.
*Steven C. Caton and Gareth Gerard Doherty (Design School)*

*Half course (spring term). W., 3–6. EXAM GROUP: 8, 9*
This course will examine the intersections between design and anthropology. In recent years, there has been a movement in anthropology toward a focus on objects, while design, which has traditionally been concerned with objects, has been moving toward the understanding of objects as part of a greater milieu. This course explores the common ethnographic ground. No background in anthropology or design required.

Note: Offered jointly with the Graduate School of Design as GSD 3336

**Anthropology 2704. Linguistic Pragmatics and Cultural Analysis in Anthropology**
Catalog Number: 4411
*Nicholas H. Harkness*

*Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16*
Exploring classic theory and recent innovations in linguistic anthropology and the semiotic anthropology of communication, we connect the social life of language to its role in culture.
Note: Limited to graduate students, who will also be expected to attend all Anthropology 1640 lectures.

Prerequisite: Limited to graduate students, who will also be expected to attend all Anthropology 1640 lectures.

**Anthropology 2706. Disease, Disability, and the Body**
Catalog Number: 87741
*Laurence A. Ralph*

*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*
This course will theorize the ways in which disability and disease become linked to inequality. We will explore the social factors that produce forms of suffering, as well as kinds of violence that people experience when social difference is mapped onto the materiality of their bodies.

Note: Expected to be given in 2013–14.
Anthropology 2712. Ethnographies of Food  
Catalog Number: 31444  
Theodore C. Bestor  
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7  
We will discuss the "food turn" in anthropology through reading contemporary (and classic) ethnographies of food in contexts of production, distribution, social exchange, gender, and science. Note: Undergraduates encouraged to participate.

*Anthropology 2722. Sonic Ethnography - (New Course)  
Catalog Number: 68581 Enrollment: Limited to 12.  
Ernst Karel  
Half course (spring term). M., Th., 10:30–12. EXAM GROUP: 3, 4, 12, 13  
This is a practice-based course in which students record, edit, and produce anthropologically informed audio works which interpret culture and lived experience. Listening sessions will provide a broad context of contemporary work using location recordings, and readings will situate the practice within the growing field of sound studies. In their projects, students will experiment with technical and conceptual strategies of recording and composition as they engage with questions of ethnographic representation through the sensory dimension of sound.  
Note: Course will also include additional weekly two-hour listening session, and occasional required technique/technology workshops, to be scheduled.  
Prerequisite: Experience in media production helpful but not required.

[Anthropology 2740 (formerly Anthropology 245). Culture, Mental Illness, and the Body]  
Catalog Number: 6013  
Byron J. Good (Medical School)  
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16  
Briefly reviews the figure of mental illness in Western thought and the social sciences, then focuses on themes in cross-cultural studies of psychopathology: culture and diagnosis; cultural influences on depression, schizophrenia, and dissociation; madness in non-Euroamerican healing systems; and transnational aspects of psychiatry.  
Note: Expected to be given in 2013–14.

Anthropology 2745. Psychological Approaches to the Anthropology of Subjectivity - (New Course)  
Catalog Number: 77819  
Byron J. Good (Medical School) and Alasdair Simon Donald (Medical School)  
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16  
This course will trace the history of psychological theories in anthropological studies of subjectivity and their influence on ethnographic writing. Although more general topics in the history of psychological anthropology will be considered, the course will give particular focus to the relevance of diverse psychoanalytic theories and clinical writing for anthropology. The course will include recent writings on topics such as violence, post-colonialism, and affect, and the place of contemporary theorists within and influenced by psychoanalysis for an anthropology of the subject and subjectivity. Theoretical, methodological and interviewing issues, as well as approaches to writing, will be considered.
[Anthropology 2750. Local Biologies: Perspectives on the Interaction Between Culture and Biology]
Catalog Number: 8267
Arthur Kleinman
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
Reviews the variety of anthropological perspectives on the interactions between culture and biology. Topics include mind-brain-society interaction in pain; cross-cultural studies of menopause; sociosomatics of depression; the new genetics and eugenics; research on stress and trauma.
Note: Expected to be given in 2013–14. Open to advanced undergraduates with permission of instructor.

Anthropology 2765. Gender in Conflict: Violence, Militarism and War
Catalog Number: 7015
Kimberly Theidon
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
In this seminar we will combine theoretical texts with classic and contemporary ethnographies to explore the anthropological study of ethics and ethical resources as related to debates that have animated the field of medical anthropology.

[Anthropology 2785. Theories of Subjectivity in Current Anthropology]
Catalog Number: 1995
Byron J. Good (Medical School)
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Note: Expected to be given in 2013–14.

[Anthropology 2795. Medical Anthropology: Theoretical Trajectories, Emergent Realities]
Catalog Number: 55818
Byron J. Good (Medical School) and Mary-Jo Del Vecchio Good (Medical School)
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Provides a critical reading of the history of medical anthropology to the present. Focuses on theoretical perspectives and debates, as well as methodologies and positioning of actors in the field.
Note: Expected to be given in 2013–14.

[Anthropology 2805. Biopolitics]
Catalog Number: 89606 Enrollment: Limited to 15.
Susan Greenhalgh
Half course (spring term). W., 10–12. EXAM GROUP: 3, 4
The modern era has seen the rise of a new field of knowledge and power that takes as its object human life itself, in the biological sense. This course traces the emergence of an anthropology of biopolitics, teasing out the concepts, problems, and ethnographic practices by which this domain is being studied. Through explorations of biological and therapeutic citizenship, new practices of
biosociality and biosecurity, and the creation of world-quality populations and persons, the course identifies new assemblages of technologies, logics, and ethics that are emerging in different spaces in an increasingly globalized world.

*Note:* Expected to be given in 2014–15. Students will be required to attend selected lectures of the undergraduate course The Woman and the Body.

**Anthropology 2812. Space and Power**
Catalog Number: 29833 Enrollment: Limited to 12.
Ajantha Subramanian
*Half course (fall term). Tu., 10–12. EXAM GROUP: 12, 13*
This course considers space as a structuring principle of social life and as a product of political activity. It treats space as a dynamic force animating human existence rather than as its static backdrop.

*Anthropology 2816. Law for Anthropologists, Anthropology for Lawyers*
Catalog Number: 89528 Enrollment: Restricted to graduate students
Sally F. Moore 7225
*Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16*
Theoretical and practical ideas, old and new, about law in society. Looking at the academic literature and at ethnographic description. The uses of the legal in fieldwork. Interpreting the place, shape, claims and efficacy of law in particular social and cultural contexts.

*Note:* Expected to be given in 2013–14.

**Anthropology 2817r. Law as a Dimension of Fieldwork: Instances and Interpretations - (New Course)**
Catalog Number: 12667
Sally F. Moore
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
This course is intended for advanced graduate students in the Anthropology Department and in the Law School who will be doing fieldwork projects for their dissertations. The emphasis will be on a wide variety of field situations and their analysis. Legal matters are shown to be a useful entry point for the study of the larger society, and can often serve as a way of identifying the major social processes that are under way at the time of observation. The writings of various social theorists will also be touched on to ask how pertinent their concepts are to the analysis of actually observed events.

*Anthropology 2826. Foucault and Anthropology*
Catalog Number: 49744
Asad A. Ahmed
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
Foucault had little interest in colonialism or law. Yet historians and anthropologists have used his ideas productively in colonial and postcolonial settings. This course explores the possibilities and limits of Foucauldian concepts and methods.

*Note:* Expected to be given in 2013–14.
*Anthropology 2830. Creative Ethnography*
Catalog Number: 98073
Mary M. Steedly
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
A writing-intensive seminar in which students explore various genres and styles of ethnographic representation by sharing work in progress. A range of supplemental readings provide descriptive models and theoretical orientations.

[Anthropology 2832. Voice and Voicing]
Catalog Number: 51326 Enrollment: Limited to graduate students
Nicholas H. Harkness
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
We explore various literal and tropic conceptualizations of "voice" and "voicing" in anthropological theory and related disciplines, including linguistics, music, philosophy, semiotics, and sociology.
Note: Expected to be given in 2013–14.
Prerequisite: Anthropology 2704 highly recommended

[*Anthropology 2837. Media Archaeology of Place*]
Catalog Number: 10136
Lucien G. Castaing-Taylor and Ernst Karel
Half course (fall term). Tu., Th., 2–4; film screenings, W 6-8pm. EXAM GROUP: 16, 17
Combining media art practice with critical inquiry and ethnographic research, Boston and other sites serve as laboratories for exploring different modes of representing place. Films, maps, sound recordings, and other media artifacts are treated as archaeological objects and are re-interpreted for exhibition.
Note: Expected to be given in 2013–14. Admission by interview with instructor.

Anthropology 2840. Ethnography and Personhood
Catalog Number: 3560
Michael Herzfeld
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Intensive, critical review of major ethnographies, exploring the relationship between society and personhood, examining ethnographic writing and its relation to other genres (including biography); and tracing anthropological theory through changes in descriptive and analytic practice.
Note: Given in alternate years.

[*Anthropology 2845. Media Anthropology Theory*]
Catalog Number: 5422
Lucien G. Castaing-Taylor
Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17
Seminar offering a critical overview of the field of media anthropology, as it has developed over the last half century. Attention will be on the media as both an object and a genre of anthropology.
Note: Expected to be given in 2013–14. Students must attend all VES 189 classes.
*Anthropology 2850r. Practicum in Foreign-Language Ethnography*

Catalog Number: 9856

Michael Herzfeld

*Half course (fall term). Hours to be arranged.*

Readings in ethnographic and related theoretical works written in a selected foreign language; discussion, class presentations, and final papers will be in that language also.

*Note:* Offered when demand and availability permit. Primarily for doctoral students.


Catalog Number: 1679

Arthur Kleinman

*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*

What do accounts of depression, suicide, substance abuse, sexually transmitted diseases, SARS, HIV/AIDS, starvation and the personal and family trauma of political violence teach us about China and the Chinese over the last few decades?

*Note:* Open to undergraduates.

[*Anthropology 2856. Biography, the Novel, Psychotherapy and Ethnography: Deep Ways of Knowing the Person in the Moral Context*]

Catalog Number: 8459

Arthur Kleinman

*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*

Compares deep ways of knowing the person in his/her cultural, political, economic and, most especially, moral context. Reads strong examples from each field to learn about individual and collective experience under uncertainty and danger.

*Note:* Expected to be given in 2014–15. Open to graduate students and advanced undergraduates.

**Anthropology 2862. Anthropology of Biomedicine**

Catalog Number: 10624

Arthur Kleinman

*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*

Examines the culture, history, institutional arrangements, social relationships, technology, training, political economy and local worlds of contemporary biomedicine. Readings are from medical anthropology, anthropology of science, history of medicine, and sociology and political science.

*Note:* Expected to be given in 2014–15.

*Prerequisite:* For graduate students and advanced undergraduates

**Anthropology 2870. Transgressive Texts: Contemporary Latin American Ethnography**

Catalog Number: 3347

Kimberly Theidon

*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*

A reading seminar of ethnographic accounts of globalization, identity formation, and political action in Latin America. We explore cultural forms and materials conditions, locating the politics
of representation within fields of power and conflict.

*Note:* Expected to be given in 2013–14.

[Anthropology 2876 (formerly Anthropology 276). New Ethnographies in the Anthropology of Social and Moral Experience]
Catalog Number: 5029
Arthur Kleinman

*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*

New ethnographies of social experience and subjectivity are remaking anthropology. Students critically examine studies of illness, violence, and cultural responses to other human problems. Emphasis is on the methodology, writing, and ethics of such ethnographies.

*Note:* Expected to be given in 2013–14. Open to advanced undergraduates.

[Anthropology 2980. “Culture”]
Catalog Number: 1114
Mary M. Steedly

*Half course (spring term). W., 3–6. EXAM GROUP: 8, 9*

“Culture” is one of anthropology’s key concepts, but there has never been agreement as to the term’s meaning. We tour the work of culture’s key theorists, with an emphasis on American anthropological perspectives. Is culture still a useful concept in anthropological analysis?

*Note:* Expected to be given in 2013–14. For first-year graduate students, or by permission of instructor. In 2009-10 (only), counts as second part of Social Anthropology Proseminar course requirement.

**Social Anthropology Cross-listed Courses**

[African and African American Studies 97. Sophomore Tutorial]
[African and African American Studies 102. The Hip Hop Generation and Post-Civil Rights Black Politics]
[African and African American Studies 119x. Chocolate, Culture, and the Politics of Food - (New Course)]
[African and African American Studies 189x. Medicine, Culture, and Society - (New Course)]
[African and African American Studies 190x. The Anthropology of Law: Perspectives from Africa and Elsewhere - (New Course)]

[History 1702 (formerly History 1923). Violence, Substances and Mental Illness: African Perspectives: Conference Course]

[Societies of the World 25 (formerly Anthropology 1825). Case Studies in Global Health: Bioskopical Perspectives]
[Societies of the World 33 (formerly Foreign Cultures 84). Tokyo]
[Societies of the World 46 (formerly Anthropology 1621). The Anthropology of Arabia]
*Visual and Environmental Studies 158br (formerly *Visual and Environmental Studies 158r). Living Documentary: Studio Course
[Visual and Environmental Studies 189. Exploring Culture Through Film]
[*Visual and Environmental Studies 350hf. Critical Media Practice: Non Fiction Filmmaking Workshop]

Graduate Courses of Reading and Research

*Anthropology 3000. Reading Course
Catalog Number: 3454
Asad A. Ahmed 5567 (on leave 2012-13), Ofer Bar-Yosef 1887 (on leave 2012-13), Theodore C. Bestor 2292, David L. Carrasco 4213 (on leave spring term), Lucien G. Castaing-Taylor 4584 (on leave 2012-13), Steven C. Caton 2307, William L. Fash 1512 (on leave 2012-13), Rowan K. Flad 5059, Byron J. Good (Medical School) 7648, Susan Greenhalgh 3297, Nicholas H. Harkness 6918, Michael Herzfeld 3122 (on leave spring term), Arthur Kleinman 7473 (on leave spring term), C. C. Lamberg-Karlovsky 2387, Matthew Joseph Liebmann 6555, Peter Der Manuelian 4279, Richard H. Meadow 1572, Sally F. Moore 7225, Jeffrey Quilter 5383, Laurence A. Ralph 1676 (on leave 2012-13), Mary M. Steedly 2783, Ajantha Subramanian 4618, Kimberly Theidon 4973, Jason A. Ur 5307, Gary Urton 4469, and James L. Watson 2172
Special reading in selected topics under the direction of members of the Department.
Note: Consult the appropriate member of the Department.

*Anthropology 3001. Reading for General Examination
Catalog Number: 5689
Members of the Department
Individual reading in preparation for the General Examination for the PhD degree.
Note: Restricted to candidates for the PhD degree and ordinarily to those who have completed at least one year in residence.

*Anthropology 3100. Old World Archaeology (Europe, Asia, and Africa)
Catalog Number: 3463
Ofer Bar-Yosef 1887 (on leave 2012-13), C. C. Lamberg-Karlovsky 2387, and Richard H. Meadow 1572

*Anthropology 3111. Asiatic Archaeology and Ethnography
Catalog Number: 5398
Rowan K. Flad 5059 and C. C. Lamberg-Karlovsky 2387

*Anthropology 3120. Scientific Archaeology
Catalog Number: 0284
Richard H. Meadow 1572

*Anthropology 3130. Archaeology and Ethnography of the Near and Middle East
Catalog Number: 3787
Ofer Bar-Yosef 1887 (on leave 2012-13) and C. C. Lamberg-Karlovsky 2387
*Anthropology 3140. Methods and Theory in Archaeology  
Catalog Number: 5440  
Members of the Department

*Anthropology 3300. Supervised Field Work in Anthropology  
Catalog Number: 5683  
Members of the Department
General instruction in field methods and practice in the various divisions of anthropology, including archaeology, ethnography, and physical anthropology. Instructional personnel and location of course vary with the research program of the staff. Lectures, conferences, field and laboratory work.  
Note: May be taken by graduate students for academic credit, but since it is tuition-free, does not count for residence credit leading to reduced tuition. Open to students with adequate previous training in the subject.

*Anthropology 3400. Reading and Research  
Catalog Number: 6699  
Members of the Department  
Note: Consult the appropriate member of the Department.

*Anthropology 3500. Direction of Doctoral Dissertations  
Catalog Number: 1864  
Members of the Department  
Note: Consult the appropriate member of the Department.

*Anthropology 3502. Thesis Writing Workshop (China dissertations)  
Catalog Number: 7300  
James L. Watson 2172 and members of the Department  
Half course (spring term).

Applied Computation

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the School of Engineering and Applied Sciences Offering Instruction in Applied Computation

Ryan Prescott Adams, Assistant Professor of Computer Science  
Katia Bertoldi, Assistant Professor of Applied Mechanics
William H. Bossert, David B. Arnold, Jr. Professor of Science
Michael P. Brenner, Glover Professor of Applied Mathematics and Applied Physics, Harvard
College Professor, Area Dean for Applied Mathematics
David M. Brooks, Gordon McKay Professor of Computer Science
Cristopher R. Cecka, Lecturer on Computational Science
Yiling Chen, Associate Professor of Computer Science
Stephen N. Chong, Assistant Professor of Computer Science
Marie D. Dahleh, Senior Lecturer on Engineering Sciences
Krzesztof Z. Gajos, Assistant Professor of Computer Science
Steven J. Gortler, Robert I. Goldman Professor of Computer Science
Efthimios Kaxiras, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Affiliate
of the Department of Chemistry and Chemical Biology
David J. Knezevic, Lecturer on Computational Science
Edward W. Kohler, Associate Professor of Computer Science
Zhiming Kuang, Gordon McKay Professor of Atmospheric and Environmental Science
H. T. Kung, William H. Gates Professor of Computer Science and Electrical Engineering
Harry R. Lewis, Gordon McKay Professor of Computer Science (on leave 2012-13)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and
Evolutionary Biology, and of Physics
Michael D. Mitzenmacher, Gordon McKay Professor of Computer Science, Area Dean for
Computer Science
John G. Morriseott, Allen B. Cutting Professor of Computer Science
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied
Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Radhika Nagpal, Fred Kavli Professor of Computer Science (on leave 2012-13)
David C. Parkes, George F. Colony Professor of Computer Science, Harvard College Professor
(on leave fall term)
Hanspeter Pfister, An Wang Professor of Computer Science
Pavlos Protopapas, Lecturer on Computational Science
Michael O. Rabin, Thomas J. Watson, Sr. Professor of Computer Science, Thomas J. Watson, Sr.
Professor of Computer Science, Emeritus (on leave fall term)
Margo I. Seltzer, Herchel Smith Professor of Computer Science
Stuart M. Shieber, James O. Welch, Jr. and Virginia B. Welch Professor of Computer Science
Michael D. Smith, John H. Finley, Jr. Professor of Engineering and Applied Sciences, Dean of
the Faculty of Arts and Sciences
Ian Stokes-Rees, Lecturer in Computational Science
Vahid Tarokh, Perkins Professor of Applied Mathematics and Vinton Hayes Senior Research
Fellow of Electrical Engineering
Eli Tziperman, Pamela and Vasco McCoy, Jr. Professor of Oceanography and Applied Physics
Salil P. Vadhan, Vicky Joseph Professor of Computer Science and Applied Mathematics
Leslie G. Valiant, T. Jefferson Coolidge Professor of Computer Science and Applied
Mathematics (on leave 2012-13)
James H. Waldo, Gordon McKay Professor of the Practice of Computer Science
Gu-yeon Wei, Gordon McKay Professor of Electrical Engineering and Computer Science
Daniel S. Weinstock, Lecturer in Computational Science
Woodward Yang, Gordon McKay Professor of Electrical Engineering and Computer Science (on leave 2012-13)

Other Faculty Offering Instruction in Applied Computation

Primarily for Graduates

**Applied Computation 263. Data and Computation on the Internet - (New Course)**
Catalog Number: 83688
Ian Stokes-Rees
*Half course (fall term). M., W., 4–5:30. EXAM GROUP: 9*
This course explores the Internet as a central component of modern scientific data processing and computation. We will examine the architecture of the Internet and the models of computation and data with which it is compatible. Through readings and exercises, students will explore the trade-offs of these various models and gain an appreciation for successful Internet-oriented system design for modern, federated, data- and compute-intensive scientific research. Students will complete a team project to develop an Internet-based system for scientific data processing. Python will be used for examples.
*Prerequisite:* A course in object-oriented programming (e.g. Computer Science 51) and familiarity with the Unix operating system or variants.

Catalog Number: 27235
Instructor to be determined
*Half course (spring term). W., 3–5, M., 7–9 p.m.*
Systematic introduction to kinetic methods for studying fluids, based on the lattice Boltzmann equation. Emphasizes theory, including discrete dynamics and symmetry, as well as hands-on programming of basic algorithms for fluid flow simulations, paying attention to understanding of the theoretical basis and connection to real fluid physics. The course lays the foundation for further research on the method extensions, particularly in complex fluids and micro/nano-fluidics and presents specific applications in various science and engineering problems.
*Prerequisite:* Knowledge of basic classical physics, fluid dynamics, and numerical methods are desirable.

**Applied Computation 274 (formerly Applied Mathematics 274). Computational Fluid Dynamics**
Catalog Number: 70261
David J. Knezevic
*Half course (spring term). Tu., Th., 10–11:30.*
A theoretical and practical introduction to the key tools in computational fluid dynamics. The course will examine a range of numerical algorithms relevant to fluids modeling, analyzing the stability, convergence and accuracy of each. Students will implement an extensive range of CFD algorithms. Topics include the hyperbolic partial differential equations and conservation laws, with a focus on numerical discretization via discontinuous Galerkin finite element methods, followed by simulation of viscous incompressible fluids via the continuous Galerkin finite
element method.

Prerequisite: A first course in scientific computing, e.g. Applied Mathematics 111 or 205, and knowledge of computer programming.

Catalog Number: 18739
Instructor to be determined
This course will provide the background and an extensive set of examples showing how computational methods are applied to modern design of materials with desired functionality. The methods will span multiple length and time scales, including molecular dynamics simulations, first-principles approaches, stochastic methods for optimization and sampling, and continuum elasticity theory. Examples will include problems in electronic and photonic devices, materials for energy conversion, storage, and environmental protection, and those related to mechanical strength of materials.

Note: Expected to be given in 2013–14.

Prerequisite: Undergraduate coursework in quantum mechanics, solid state physics, thermodynamics and statistical mechanics is recommended. Knowledge of physical chemistry and solid mechanics is required.

Applied Computation 298r. Interdisciplinary Seminar in Computational Science & Engineering - (New Course)
Catalog Number: 46142
Efthimios Kaxiras and Daniel Weinstock
Half course (spring term). F., 12–3. EXAM GROUP: 5, 6, 7
This course, centered on the Institute for Applied Computation Science (IACS) seminar series, will provide broad exposure to cutting-edge topics, applications, and unifying concepts in Computational Science & Engineering. Students will read, present and discuss journal articles related to IACS talks, attend the seminars and meet with visiting speakers. Possible topics to be covered include scientific visualization, computational approaches to disease, mathematical neuroscience, computational archeology, and computational finance.
William H. Bossert, David B. Arnold, Jr. Professor of Science
Michael P. Brenner, Glover Professor of Applied Mathematics and Applied Physics, Harvard
College Professor, Area Dean for Applied Mathematics (Director of Undergraduate Studies)
Yiling Chen, Associate Professor of Computer Science
Kenneth B. Crozier, Associate Professor of Electrical Engineering on the Gordon McKay
Endowment
Marie D. Dahleh, Senior Lecturer on Engineering Sciences
Ozlem Ergun, Visiting Associate Professor of Applied Mathematics
Robert D. Howe, Abbott and James Lawrence Professor of Engineering, Area Dean for
Bioengineering
Evelyn Hu, Gordon McKay Professor of Applied Physics and of Electrical Engineering, Area
Dean for Electrical Engineering
Efthimios Kaxiras, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Affiliate
of the Department of Chemistry and Chemical Biology
Navin Khaneja, Gordon McKay Professor of Electrical Engineering
David J. Knezevic, Lecturer on Computational Science
Margo S. Levine, Lecturer on Applied Mathematics (Assistant Director of Undergraduate
Studies)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and
Evolutionary Biology, and of Physics
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied
Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Pavlos Protopapas, Lecturer on Computational Science
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied
Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied
Physics
James R. Rice, Mallinckrodt Professor of Engineering Sciences and Geophysics (on leave fall
term)
Mauricio Santillana, Lecturer on Applied Mathematics
Agnese Seminara, Lecturer in Applied Mathematics
Avi Shapiro, Preceptor in Applied Mathematics
Jenny Suckale, Lecturer on Applied Mathematics
Vahid Tarokh, Perkins Professor of Applied Mathematics and Vinton Hayes Senior Research
Fellow of Electrical Engineering
Eli Tziperman, Pamela and Vasco McCoy, Jr.Professor of Oceanography and Applied Physics
Salil P. Vadhan, Vicky Joseph Professor of Computer Science and Applied Mathematics
Leslie G. Valiant, T. Jefferson Coolidge Professor of Computer Science and Applied
Mathematics (on leave 2012-13)

Other Faculty Offering Instruction in Applied Mathematics

Donald G. M. Anderson, Gordon McKay Professor of Applied Mathematics, Emeritus
Roger W. Brockett, An Wang Professor of Electrical Engineering and Computer Science,
Emeritus
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of
Applied Physics
Zhiming Kuang, Gordon McKay Professor of Atmospheric and Environmental Science
H. T. Kung, William H. Gates Professor of Computer Science and Electrical Engineering
Brendan J. Meade, Associate Professor of Earth and Planetary Sciences


For information concerning the concentration in Applied Mathematics, please consult the Director of Undergraduate Studies or the Office of Student Affairs, School of Engineering and Applied Sciences, Pierce Hall 110. Many additional courses of interest to applied mathematicians can be found in the Computer Science, Engineering Sciences, Mathematics, and Statistics sections of the catalog.

**Primarily for Undergraduates**

**Applied Mathematics 21a. Mathematical Methods in the Sciences**
Catalog Number: 6395
_Evelyn Hu and Kenneth B. Crozier_
_Half course (fall term). M., W., F., at 11. EXAM GROUP: 4_
_Note:_ May not be taken for credit by students who have passed Mathematics 21a. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.
_Prerequisite:_ Mathematics 1b or equivalent.

**Applied Mathematics 21b. Mathematical Methods in the Sciences**
Catalog Number: 5074
_Margo S. Levine and Avi Shapiro_
_Half course (spring term). M., W., F., at 1. EXAM GROUP: 6_
_Note:_ May not be taken for credit by students who have passed Mathematics 21b. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.
_Prerequisite:_ Applied Mathematics 21a or equivalent.
**Applied Mathematics 50 (formerly Applied Mathematics 50hf). Introduction to Applied Mathematics**

Catalog Number: 9344 Enrollment: Limited to 45.

Marie D. Dahleh and Mauricio Santillana

Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7

Introduction to the problems and issues of applied mathematics. This will be accomplished both through the reading of papers that use mathematical arguments to have substantial impact on some field of human activity, as well as guest lecturers from around Harvard to discuss how mathematics is used in their field.

*Note:* Preference given to freshmen and sophomores.

**Applied Mathematics 91r. Supervised Reading and Research**

Catalog Number: 7607

Marie D. Dahleh and Margo S. Levine

Half course (fall term; repeated spring term). Hours to be arranged.

An individual project of guided reading and research culminating in a substantial paper or other piece of work which can be meaningfully evaluated to assign a letter grade; may not be taken on a PA/FL basis. Students engaged in preparation of a senior thesis ordinarily should take Applied Mathematics 99r instead.

*Note:* May be taken as a half course in either term; normally may not be taken for more than two terms. Applications may be obtained at Pierce Hall 110. Students should consult their advisers and concentration literature for further information and guidance. Applications must be signed by the student, by the faculty member supervising the project (who will recommend the grade), and by the Director of Undergraduate Studies, who will sign the student’s study card once the project and its method of evaluation have been approved.

**Applied Mathematics 99r. Thesis Research**

Catalog Number: 4648

Marie D. Dahleh and Margo S. Levine

Half course (fall term; repeated spring term). Hours to be arranged.

Provides an opportunity for students to engage in preparatory research and the writing of a senior thesis. Graded on a SAT/UNS basis as recommended by the thesis supervisor. The thesis is evaluated by the supervisor and by two additional readers.

*Note:* May be taken as a half course in either term; normally may not be taken for more than two terms. The Director of Undergraduate Studies will sign the student’s study card once a faculty member has agreed in writing to supervise preparation of the thesis, and reaffirmed this agreement if the course is to be repeated. Applications may be obtained at Pierce Hall 110. Students should consult their advisers and concentration literature for further information and guidance.

**For Undergraduates and Graduates**

**Applied Mathematics 101. Statistical Inference for Scientists and Engineers**

Catalog Number: 3350

Robert D. Howe

Half course (fall term). M., W., 11–12:30. EXAM GROUP: 4, 5
Introductory statistical methods for students in the applied sciences and engineering. Random variables and probability distributions; the concept of random sampling, including random samples, statistics, and sampling distributions; the Central Limit Theorem and its role in statistical inference; parameter estimation, including point estimation and maximum likelihood methods; confidence intervals; hypothesis testing; simple linear regression; and multiple linear regression. Introduction to more advanced techniques as time permits.

Note: May not be taken in addition to Engineering Sciences 101. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Prerequisite: Applied Mathematics 21b or Mathematics 21b or equivalent.

Applied Mathematics 104 (formerly Applied Mathematics 105a). Series Expansions and Complex Analysis
Catalog Number: 7732
Efthimios Kaxiras and Pavlos Protopapas
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Introduces fundamental concepts for solving real-world problems and emphasizes their applications through examples from the physical and social sciences. Topics: series expansions and their convergence; complex functions, mappings, differentiation, integration, residues, Taylor and McLaurin expansions; wave (Fourier) and wavelet expansions and transformations, and their uses in signal and image analysis and solving differential equations.

Prerequisite: Applied Mathematics 21a and 21b, or Mathematics 21a and 21b.

Applied Mathematics 105 (formerly Applied Mathematics 105b). Ordinary and Partial Differential Equations
Catalog Number: 6316
Michael P. Brenner
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4

Prerequisite: Applied Mathematics 21a and 21b, or Mathematics 21a and 21b.

Applied Mathematics 106. Applied Algebra
Catalog Number: 3871
Vahid Tarokh
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Introduction to abstract algebra and its applications. Sets, subsets, and partitions; mappings, operations, and equivalence relations; groups, rings, and fields, polynomials, encryption, computer coding, application of modular arithmetic, combinatorial designs, lattices, application of trellis representation of lattices, fast algorithms.

Prerequisite: Applied Mathematics 21a and 21b, or Mathematics 21a and 21b

Applied Mathematics 107. Graph Theory and Combinatorics
Catalog Number: 6411
Ozlem Ergun  
**Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13**
Topics in combinatorial mathematics that find frequent application in computer science, engineering, and general applied mathematics. Specific topics taken from graph theory, enumeration techniques, optimization theory, combinatorial algorithms, and discrete probability.

**Applied Mathematics 111. Introduction to Scientific Computing**  
Catalog Number: 7000  
Jenny Suckale  
**Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13**
Many complex physical problems defy simple analytical solutions or even accurate analytical approximations. Scientific computing can address certain of these problems successfully, providing unique insight. This course introduces some of the widely used techniques in scientific computing through examples chosen from physics, chemistry, and biology. The purpose of the course is to introduce methods that are useful in applications and research and to give the students hands-on experience with these methods.  
**Prerequisite:** Applied Mathematics 21a and 21b, or Mathematics 21a and 21b, or permission of instructor.

**Applied Mathematics 115. Mathematical Modeling**  
Catalog Number: 1768  
William H. Bossert, Margo S. Levine, and Avi Shapiro, (fall term), Brendan J. Meade and Zhiming Kuang (spring term)  
**Half course (fall term; repeated spring term). Fall: M., W., 11–12:30; Spring: M., W., 1–2:30. EXAM GROUP: Fall: 4, 5; Spring: 6, 7**
Abstracting the essential components and mechanisms from a natural system to produce a mathematical model, which can be analyzed with a variety of formal mathematical methods, is perhaps the most important, but least understood, task in applied mathematics. This course approaches a number of problems without the prejudice of trying to apply a particular method of solution. Topics drawn from biology, economics, engineering, physical and social sciences.  
**Prerequisite:** Mathematics at least at the level of Applied Mathematics 21a, b but preferably at the level of Applied Mathematics 105 (formerly Applied Mathematics 105b). Additional skills in analysis, algebra, probability, statistics and computer programming will increase the value of the course to students.

**Applied Mathematics 120. Applicable Linear Algebra**  
Catalog Number: 4378  
Mauricio Santillana (fall term) and H. T. Kung (spring term)  
**Half course (fall term; repeated spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17**
An algorithmic approach to topics in matrix theory which arise frequently in applied mathematics: linear equations, pseudoinverses, quadratic forms, eigenvalues and singular values, linear inequalities and optimization, linear differential and difference equations.  
**Prerequisite:** Applied Mathematics 21b, or Mathematics 21b, or equivalent.
Applied Mathematics 121. Introduction to Optimization: Models and Methods
Catalog Number: 3187 Enrollment: Limited to 60.
Yiling Chen
Half course (spring term). M., W., 1–2:30; Tu., 7–8:30 p.m. EXAM GROUP: 6
Note: May not be taken in addition to Engineering Sciences 102.
Prerequisite: Applied Mathematics 21b or Mathematics 21b (linear algebra) and some knowledge of probability and statistics at the level of Statistics 110 or Applied Mathematics 101 or permission of instructor.

Applied Mathematics 147. Nonlinear Dynamical Systems
Catalog Number: 7708
Philippe Cluzel
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
An introduction to nonlinear dynamical phenomena, covering the behavior of systems described by ordinary differential equations. Topics include: stability; bifurcations; chaos; routes to chaos and universality; approximations by maps; strange attractors; fractals. Techniques for analyzing nonlinear systems are introduced with applications to physical, chemical, and biological systems such as forced oscillators, chaotic reactions, and population dynamics.
Prerequisite: Mathematics 21a and 21b, or Applied Mathematics 21a and 21b.

Cross-listed Courses
[Earth and Planetary Sciences 100. The Missing Matlab Course: An Introduction to Programming and Data Analysis]
MCB 111. Mathematics in Biology
MCB 131. Computational Neuroscience
MCB 198. Advanced Mathematical Techniques for Modern Biology

Primarily for Graduates

Applied Mathematics 201. Physical Mathematics I
Catalog Number: 3241
Agnese Seminara
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
Introduction to methods for developing accurate approximate solutions for problems in the sciences that cannot be solved exactly, and integration with numerical methods and solutions. Topics include: approximate solution of integrals, algebraic equations, nonlinear ordinary differential equations and their stochastic counterparts, and partial differential equations. Introduction to "sophisticated" uses of MATLAB.
Prerequisite: Applied Mathematics 104 (formerly Applied Mathematics 105a), Applied Mathematics 105 (formerly Applied Mathematics 105b) or equivalent.
**Applied Mathematics 202. Physical Mathematics II**

Catalog Number: 6559  
Eli Tziperman  

*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*

Theory and techniques for finding exact and approximate analytical solutions of partial differential equations: eigenfunction expansions, Green functions, variational calculus, transform techniques, perturbation methods, characteristics, selected nonlinear PDEs, introduction to numerical methods.  

*Note:* Applied Mathematics 201 and Applied Mathematics 202 are independent of each other and may be taken at any order.  

*Prerequisite:* Applied Mathematics 104 (formerly Applied Mathematics 105a) and Applied Mathematics 105 (formerly Applied Mathematics 105b) or equivalent.

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**Applied Mathematics 205. Advanced Scientific Computing: Numerical Methods**

Catalog Number: 1370  
David J. Knezevic  

*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

An examination of the mathematical foundations of a range of well-established numerical algorithms, exploring their use through practical examples drawn from a range of scientific and engineering disciplines. Emphasizes theory and numerical analysis to elucidate the concepts that underpin each algorithm. There will be a significant programming component. Students will be expected to implement in Matlab a range of numerical methods through individual and group-based project work to get hands-on experience with modern scientific computing.  

*Prerequisite:* Familiarity with linear algebra and calculus; basic programming knowledge at the Computer Science 50 level.

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**Applied Mathematics 206. Advanced Applied Algebra**

Catalog Number: 6018  
Vahid Tarokh  

*Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8*

Sets, subsets, and partitions; mappings, operations, and equivalence relations; groups, rings, and fields, polynomials, encryption, computer coding, application of modular arithmetic, combinatorial designs, lattices, application of trellis representation of lattices, fast algorithms; selected readings.  

*Note:* Meets with Applied Mathematics 106. Students enrolled in Applied Mathematics 206 will be assigned additional readings.

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Catalog Number: 78757  
Pavlos Protopapas  

*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

Develops skills for computational research with focus on stochastic approaches, emphasizing implementation and examples. Stochastic methods make it feasible to tackle very diverse problems when the solution space is too large to explore systematically, or when microscopic rules are known, but not the macroscopic behavior of a complex system. Methods will be
illustrated with examples from a wide variety of fields, ranging from simulating the immune system to strategies for investing in financial markets. 

*Prerequisite:* Basic knowledge of a computer programming language (such as C or/and Python).

**Applied Mathematics 215. Fundamentals of Biological Signal Processing**  
Catalog Number: 23661 Enrollment: Limited to 20.  
*Sharad Ramanathan and L. Mahadevan*  
*Half course (spring term). Tu., Th., 10–11:30.*  
The course will introduce Bayesian analysis, maximum entropy principles, hidden markov models and pattern theory. These concepts will be used to understand information processing in biology. The relevant biological background will be covered in depth. 

*Prerequisite:* A strong background in Calculus, Linear Algebra, Fourier Analysis, complex analysis at the advanced undergraduate level and an introductory knowledge of probability theory is required. Knowledge of Statistical Mechanics and comfort with programming will be useful.

**Applied Mathematics 221. Advanced Optimization**  
Catalog Number: 84323  
*Ozlem Ergun*  
*Half course (fall term). M., W., 2:30–4.*  
Advanced techniques for modeling and solving large and difficult optimization problems as well as the core theory and geometry of linear inequalities, integer programming and combinatorial optimization. Topics covered: geometry and theory of linear programming, solving large scale optimization problems using column and constraint generation, network flows, computational complexity, basic integer programming models and algorithms, paths and trees, matchings, integrality of polyhedra, and matroids. Emphasis will be on developing an understanding of the core theory and solution methods. Exercises and the class project will involve developing and implementing optimization algorithms possibly using standard solvers such as AMPL.  

*Note:* Offered jointly with the Business School as 4460.  
*Prerequisite:* Applied Mathematics 21b or Mathematics 21b (linear algebra) and AM 121 or equivalent or permission of instructor. Comfort with programming.

**Applied Mathematics 222. Stochastic Modeling - (New Course)**  
Catalog Number: 78317  
*Douglas Stephen Fearing (Business School)*  
*Half course (spring term). Tu., Th., 4:15–5:45. EXAM GROUP: 18*  
The course covers the modeling, analysis, and control of stochastic systems. Topics include a review of probability fundamentals, Markov chains, Markov decision processes and dynamic programming, Poisson processes, queuing theory, and optimization under uncertainty. Applications will be presented in production planning, inventory management, service systems, and sports. The goal of the course is to introduce archetypical problems in each area as well as foundational theoretical results. Coming out of this course, students should be well-positioned to take further graduate courses on any of the areas covered.  

*Note:* Offered jointly with the Business School as 4465.  
*Prerequisite:* Applied Mathematics 121.
**Applied Mathematics 299r. Special Topics in Applied Mathematics**  
Catalog Number: 5798  
*Michael P. Brenner*  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Supervision of experimental or theoretical research on acceptable applied mathematics problems and supervision of reading on topics not covered by regular courses of instruction.  
*Note:* Open to graduate students and AB/SM candidates only. Students must arrange such work with a member of the School of Engineering and Applied Sciences. This course is graded and is ordinarily taken with the approval of the Committee on Higher Degrees. Applicants must file a project sheet before study cards are filed. Project sheets may be obtained from the Student Affairs Office, Pierce Hall 110.

**Cross-listed Courses**

**Applied Computation 274 (formerly Applied Mathematics 274). Computational Fluid Dynamics**  
*Computer Science 365. SEAS Teaching Practicum*

**Graduate Courses of Reading and Research**

Reading courses are odd-numbered; research courses are even-numbered.

-*Applied Mathematics 311,312. Numerical Mathematics: Analysis, Synthesis and Computation*  
Catalog Number: 7333,6118  
*Donald G. M. Anderson 1061*

Catalog Number: 2458,2459  
*Roger W. Brockett 3001*

-*Applied Mathematics 317,318. Special Topics in Physical Mathematics*  
Catalog Number: 9160,2166  
*Michael P. Brenner 4101*

-*Applied Mathematics 319,320. Topics in Macroscopic Physics and Quantitative Biology*  
Catalog Number: 2084,4567  
*L. Mahadevan 4758*

-*Applied Mathematics 321,322. Biological Applications of Mathematics and Automatic Computers*
2012-2013 Previous Courses of Instruction

Catalog Number: 7615,4243
William H. Bosser 1049

*Applied Mathematics 331,332. Theoretical Mechanics in the Earth and Engineering Sciences
Catalog Number: 0112,0251
James R. Rice 7270 (on leave fall term)

Catalog Number: 0970,6033
Navin Khaneja 4192

Applied Physics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the School of Engineering and Applied Sciences Offering Instruction in Applied Physics

Joanna Aizenberg, Amy Smith Berylson Professor of Materials Science
Michael J. Aziz, Gene and Tracy Sykes Professor of Materials and Energy Technologies
David C. Bell, Gordon McKay Professor of the Practice of Electron Microscopy
Michael P. Brenner, Glover Professor of Applied Mathematics and Applied Physics, Harvard College Professor, Area Dean for Applied Mathematics
Federico Capasso, Robert L. Wallace Professor of Applied Physics and Vinton Hayes Senior Research Fellow in Electrical Engineering (on leave spring term)
David R. Clarke, Gordon McKay Professor of Applied Physics
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Kenneth B. Crozier, Associate Professor of Electrical Engineering on the Gordon McKay Endowment
Cynthia M. Friend, Theodore William Richards Professor of Chemistry and Professor of Materials Science
Jene A. Golovchenko, Rumford Professor of Physics and Gordon McKay Professor of Applied Physics (on leave spring term)
Fawwaz Habbal, Senior Lecturer on Applied Physics
Donhee Ham, Gordon McKay Professor of Electrical Engineering and Applied Physics
Lene V. Hau, Mallinckrodt Professor of Physics and of Applied Physics (on leave fall term)
Evelyn Hu, Gordon McKay Professor of Applied Physics and of Electrical Engineering, Area Dean for Electrical Engineering
Efthimios Kaxiras, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Affiliate of the Department of Chemistry and Chemical Biology
David Keith, Gordon McKay Professor of Applied Physics
Carolann Koleci, Preceptor in Applied Physics
Charles M. Lieber, Mark Hyman, Jr. Professor of Chemistry
Marko Loncar, Tiantsai Lin Professor of Electrical Engineering
Amirhamed Majedi, Visiting Associate Professor in Engineering Sciences
Vinothan N. Manoharan, Associate Professor of Chemical Engineering and of Physics, Gordon McKay Professor of Chemical Engineering and Professor of Physics
Eric Mazur, Balkanski Professor of Physics and Applied Physics, Area Dean for Applied Physics
Ian D. Morrison, Lecturer on Applied Physics
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Venkatesh Narayanamurti, Benjamin Peirce Professor of Technology and Public Policy (on leave 2012-13)
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of Applied Physics and of Molecular and Cellular Biology
David R. Nelson, Arthur K. Solomon Professor of Biophysics and Professor of Physics and Applied Physics (on leave spring term)
Kevin K. Parker, Tarr Family Professor of Bioengineering and Applied Physics (on leave fall term)
Peter S. Pershan, Frank B. Baird, Jr. Professor of Science (on leave fall term)
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Shriram Ramanathan, Associate Professor of Materials Science
James R. Rice, Mallinckrodt Professor of Engineering Sciences and Geophysics (on leave fall term)
Frans A. Spaepen, John C. and Helen F. Franklin Professor of Applied Physics (on leave spring term)
Eli Tziperman, Pamela and Vasco McCoy, Jr. Professor of Oceanography and Applied Physics
David A. Weitz, Mallinckrodt Professor of Physics and of Applied Physics
Robert M. Westervelt, Mallinckrodt Professor of Applied Physics and of Physics
Tai T. Wu, Gordon McKay Professor of Applied Physics and Professor of Physics
Amir Yacoby, Professor of Physics and of Applied Physics

Other Faculty Offering Instruction in Applied Physics

Zhiming Kuang, Gordon McKay Professor of Atmospheric and Environmental Science
Paul C. Martin, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Emeritus
Patrick Thaddeus, Robert Wheeler Willson Professor of Applied Astronomy, Emeritus

The School of Engineering and Applied Sciences (www.seas.harvard.edu) offers undergraduate and graduate courses in Applied Mathematics, Applied Physics, Computer Science, Earth and
Planetary Sciences, and Engineering Sciences. Engineering and Applied Sciences faculty also offer several courses in the section entitled Freshman Seminars, Extra-Departmental Courses, and House Seminars.

**Primarily for Undergraduates**

*Applied Physics 50a. Physics as a Foundation for Science and Engineering, Part I - (New Course)*

Catalog Number: 77155 Enrollment: Limited to 50.

Eric Mazur and Carolann Koleci

Half course (fall term). M., W., 1–4. EXAM GROUP: 6, 7, 8

AP 50a is the first half of a one-year, project-based applied physics sequence, equivalent in content and rigor to a standard introductory physics course for scientists and engineers, but focusing on the application of physics to real-world problems. Project teams apply scientific inquiry and modeling to construct, perform, analyze, and report on roughly month-long projects inspired by problems from mechanical engineering, electrical engineering, biomechanical engineering, environmental engineering, and energy. Designed for freshmen and sophomores with an interest in science or engineering.

*Note:* Students should commit to taking both AP 50a and AP 50b. Satisfies the premedical requirements and the introductory physics requirements for most science and engineering concentrations.

*Prerequisite:* Mathematics preparation at least at the level of Mathematics 1b concurrently is required. However, some elementary ideas from multivariable calculus are used and students are encouraged to take Applied Mathematics 21a or Mathematics 21a concurrently. The mathematics content of Applied Physics 50a will be coordinated with Applied Mathematics 21a. This course can be taken concurrently with AM 21a to meet the calculus prerequisite. This course can be taken concurrently with AM 21a to meet the calculus prerequisite.

*Applied Physics 50b. Physics as a Foundation for Science and Engineering, Part II - (New Course)*

Catalog Number: 92262 Enrollment: Limited to 50.

Eric Mazur and Carolann Koleci

Half course (spring term). M., W., 2–5. EXAM GROUP: 7, 8, 9

AP 50b is the second half of a one-year, project-based applied physics sequence (see also AP50a), focusing on the application of physics to real-world problems. Project teams apply scientific inquiry and modeling to construct, perform, analyze, and report on roughly month-long projects inspired by problems from mechanical engineering, electrical engineering, biomechanical engineering, environmental engineering, and energy. Designed for freshmen and sophomores with an interest in science or engineering.

*Note:* Satisfies the premedical requirements and the introductory physics requirements for most science and engineering concentrations.

*Prerequisite:* A solid knowledge of multivariable calculus at the level of Applied Math 21a or Math 21a is required. Mathematics 21a can be taken concurrently.

For Undergraduates and Graduates
**Applied Physics 195. Introduction to Solid State Physics**  
Catalog Number: 1842  
Federico Capasso  
*Half course (fall term). W., F., 1–2:30. EXAM GROUP: 6, 7*  
*Note:* Designed as a first course in solid state physics for students with knowledge of elementary quantum mechanics, for example, Physics 143a. Some knowledge of statistical physics is also helpful, but not a formal prerequisite. Students who propose to take Applied Physics 295a in the spring term, and who have not previously taken a formal course in solid state physics, are strongly advised to take this course first.  

**Cross-Listed Courses**

**Applied Mathematics 147. Nonlinear Dynamical Systems**  
[Earth and Planetary Sciences 131. Introduction to Physical Oceanography and Climate]  
**Physics 129. Energy Science**  
*Primarily for Graduates*  

Additional courses of interest to graduate students in Applied Physics include: Applied Mathematics 203, Engineering Sciences 220, 225r, 240, 241, 242r, 246, 247, and 274.

**Applied Physics 216. Modern Optics and Quantum Electronics**  
Catalog Number: 4691  
Amirhamed Majedi  
*Half course (fall term). M., F., 11–12:30. EXAM GROUP: 4, 5*  
We cover the fundamental physics of light and of light-matter interactions. The field has great importance in many active research areas. Topics include quantization of the electromagnetic field, Fourier optics, lasers, optics with nanostructures, and optics in biology.  
*Note:* Offered in alternate years.  
*Prerequisite:* A class in electromagnetism/electrodynamics.  

[Applied Physics 217. Applications of Modern Optics]  
Catalog Number: 6965  
Vinothan N. Manoharan  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
Optical systems and lasers have recently revolutionized both technology and basic research. We cover simple models of light-matter interactions, Fourier optics and holography, light scattering, and optics in biology: single-molecule studies, optical coherence tomography, nonlinear imaging techniques.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* An undergraduate course in electromagnetism and quantum mechanics.
Applied Physics 218. Electrical, Optical, and Magnetic Properties of Materials
Catalog Number: 9804
Shriram Ramanathan
*Half course (spring term).* M., W., 1–2:30. EXAM GROUP: 6, 7
Classical and quantum description of electrical, optical and magnetic properties, and their fundamental physical origins; experimental techniques. Properties of compositionally complex materials such as ceramics. Structure-property relations. Applications in semiconductor, information storage, and energy industries.
*Prerequisite:* Introductory solid-state physics or equivalent course.

Applied Physics 225. Introduction to Soft Matter
Catalog Number: 5298
Ian D. Morrison
*Half course (fall term).* M., W., 2:30–4. EXAM GROUP: 7, 8
Introduction to the physics of soft matter, also called complex fluids or squishy physics, includes the study of capillarity, thin films, polymers, polymer solutions, surfactants, and colloids. Emphasis is on physical principles which scale bulk behavior. Students will understand the concepts, experimental techniques, and, especially, the open questions. Lecture notes are supplied in place of a textbook.
*Prerequisite:* Knowledge of basic thermodynamics, statistical mechanics and differential equations.

Catalog Number: 5796
Instructor to be determined
*Half course (spring term).* M., W., 2:30–4. EXAM GROUP: 7, 8
Consider phenomena strongly influenced by surface tensions, high curvatures, thin films, diffusion, adsorption, wetting, which are variously mobile, dynamic, polymeric, transient, and fragile. Emphasis on the physics, thermodynamics, rheological, and scaling laws that govern bulk behavior.
*Note:* Expected to be given in 2013–14. Offered in alternate years.
*Prerequisite:* Knowledge of thermodynamics and basic statistical mechanics and some familiarity with phase diagrams and differential equations.

Applied Physics 235. Chemistry in Materials Science and Engineering
Catalog Number: 5081
Joanna Aizenberg
*Half course (spring term).* Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Select topics in materials chemistry, focusing on chemical bonds, crystal chemistry, organic and polymeric materials, hybrid materials, surfaces and interfaces, self-assembly, electrochemistry, biomaterials, and bio-inspired materials synthesis.
*Prerequisite:* Introductory thermodynamics, chemistry or equivalent.

Catalog Number: 5737
Frans A. Spaepen
2012-2013 Previous Courses of Instruction

Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Bonding, crystallography, diffraction, phase diagrams, microstructure, point defects, dislocations, and grain boundaries.
Note: Intended for students in applied mechanics, materials science, condensed matter physics, and chemistry.

[Applied Physics 284. Statistical Thermodynamics]
Catalog Number: 2257
David R. Nelson
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Basic principles of statistical physics and thermodynamics, with applications including: the equilibrium properties of classical and quantum gases, phase transitions and critical phenomena, as illustrated by the liquid-gas transition and simple magnetic models. Our treatment will include Bose-Einstein condensation and degenerate Fermi gases.
Note: Expected to be given in 2013–14. Students may wish to take Physics 262 when this course is bracketed.
Prerequisite: Ordinarily, Physics 143a, b, and Physics 181 or Engineering Sciences 181.

Applied Physics 291. Electron Microscopy Laboratory
Catalog Number: 1761 Enrollment: Limited to 15.
David C. Bell
Half course (spring term). M., 2-3:30, and a three-hour laboratory session to be arranged. EXAM GROUP: 7, 8
Lectures and laboratory instruction on transmission electron microscopy (TEM) and Cs corrected, aberration-correction microscopy and microanalysis. Lab classes include; diffraction, dark field imaging, X-ray spectroscopy, electron energy-loss spectroscopy, atomic imaging, materials sample preparation, polymers, and biological samples.
Note: Primarily for graduate students planning to use TEM for their research.

Catalog Number: 3733
Frans A. Spaepen
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Kinetic principles underlying atomic motions, transformations, and other atomic transport processes in condensed phases. Application to atomic diffusion, continuous phase transformations, nucleation, growth, coarsening, and other kinetic phenomena in bulk, thin film, and surface states.
Note: Will not be offered in 2012-13. Offered in alternate years.
Prerequisite: An undergraduate-level course in thermodynamics.

Applied Physics 293 (formerly Deformation of Solids). Dislocations and Deformation Behavior of Materials
Catalog Number: 6796
David R. Clarke
Half course (fall term). Tu., Th., 10:30–12. EXAM GROUP: 12, 13
Dislocations are fundamental defects in crystalline solids affecting deformation and crystal
growth. The use of dislocations to establish constitutive behavior for the deformation of materials over a wide variety of stresses and temperatures, as well as in modeling stress distributions and interfacial reactions will be included.

Note: Offered in alternate years.
Prerequisite: Knowledge of thermodynamics, electromagnetism and elements of crystal structure.

*Applied Physics 294hfr. Materials Science Seminar*
Catalog Number: 4924
David R. Clarke, Michael J. Aziz, and Frans A. Spaepen
Half course (throughout the year). Th., at 4. EXAM GROUP: 18
Special topics in materials science.
Note: First meeting will be Thursday, September 6, 12 pm, in Gordon McKay 402.
Prerequisite: See instructor.

Catalog Number: 6937
Eugene A.Demler
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Properties of solids, electrical, optical, thermal, magnetic, mechanical, are treated based on an atomic scale picture and using the single electron approximation. Metals, semiconductors, and insulators are covered, including special topics such as superconductivity.
Note: Expected to be given in 2013–14. Students may wish to take Physics 296 when this course is bracketed.
Prerequisite: Applied Physics 195 or equivalent, and one full quantum mechanics graduate level course similar to Physics 251a. Physics 251b may be taken concurrently.

Catalog Number: 3610
Instructor to be determined
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Theoretical description of solids focusing on the effects of interactions between electrons, including dielectric response, magnetism, and superconductivity. Also, subjects from the physics of strongly correlated systems, such as quantum antiferromagnetism and high temperature superconductors.
Note: Expected to be given in 2013–14.
Prerequisite: Applied Physics 295a, Physics 251a, and 251b, or permission of instructor.

Applied Physics 298r. Interdisciplinary Chemistry, Engineering and Physics: Seminar
Catalog Number: 7500
Robert M. Westervelt and members of the Faculty
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
Materials-related topics chosen from: Structure and Self-Assembly; Mechanical Properties; Surfaces and Interfaces; Biomaterials; Synthesis and Fabrication; Characterization Techniques; Soft Materials, and Complex Fluids.
Note: The class will be divided into teams and each team will spend 4 weeks investigating a
current research problem posed by a faculty member. This will entail reading and lab work and will be followed by a presentation to the full class. Each team will work on 3 problems through the term. Suitable for graduate students with undergraduate concentrations in chemistry, engineering, or physics having present or potential research interests in this field. The course will provide an introduction to current research problems as well as the methodology of research and presentation. A final paper based on one theme will also be required. Taught by faculty from Chemistry, Physics, and the School of Engineering and Applied Sciences who are associated with Harvard’s Materials Research Science and Engineering Center.

**Applied Physics 299r. Special Topics in Applied Physics**  
Catalog Number: 2103  
Eric Mazur  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Supervision of experimental or theoretical research on acceptable applied physics problems and supervision of reading on topics not covered by regular courses of instruction.  
*Note:* Open to graduate students and AB/SM candidates only. Students must arrange such work with a member of the School of Engineering and Applied Sciences. This course is graded and is ordinarily taken with the approval of the Committee on Higher Degrees. Applicants must file a project sheet before study cards are filed. Project sheets may be obtained from the Student Affairs Office, Pierce Hall 110.

**Cross-Listed Courses**

*Computer Science 365. SEAS Teaching Practicum*

[*Physics 215. Biological Dynamics]*

**Physics 232 (formerly Physics 232a). Advanced Classical Electromagnetism**

**Graduate Courses of Reading and Research**

Reading courses are odd-numbered; research courses are even-numbered.

*Applied Physics 301,302. Ultrafast Electronic Devices*  
Catalog Number: 6859,6068  
Donhee Ham 4519

*Applied Physics 303,304. Materials Science of Biological Inorganic Nanostructures*  
Catalog Number: 3564,9306  
Joanna Aizenberg 5876

*Applied Physics 321,322. Materials Physics and Engineering*  
Catalog Number: 24677,91306  
David R. Clarke 6684

*Applied Physics 323,324. Topics in Materials Science*  
Catalog Number: 5947,5970  
Shriram Ramanathan 5341
*Applied Physics 325,326. Optics with Cold Atoms, Nano-structures, and Bio-molecules
Catalog Number: 0488,7669
Lene V. Hau 2151 (on leave fall term)

*Applied Physics 329,330. Heterogeneous Nanophotonic Devices and Bio-templated
Electronic Materials
Catalog Number: 69998,18476
Evelyn Hu 6682

*Applied Physics 331,332. Experimental Condensed Matter Physics
Catalog Number: 0467,1560
Robert M. Westervelt 6148

*Applied Physics 333,334. Electronic Properties of Nanostructures, Interaction of
Biomolecules with Nanostructures, and X-Ray Physics
Catalog Number: 1033,6126
Jene A. Golovchenko 1986 (on leave spring term)

*Applied Physics 335,336. Theoretical Study of the Structure and Electronic Properties of
Nanoscale Materials and Biological Macromolecules
Catalog Number: 7902,7903
Efthimios Kaxiras 3050

*Applied Physics 337,338. Growth and Properties of Nanostructures and Nanostructure
Assemblies; Development and Application of New Probe Microscopies; Biophysics
Catalog Number: 3050,3051
Charles M. Lieber 3102

*Applied Physics 339,340. Topics in Electromagnetic Theory
Catalog Number: 4258,3127
Tai T. Wu 1051

Catalog Number: 1441,0650
Marko Loncar 5703

*Applied Physics 343,344. Topics in Electromagnetic Theory and Molecular Spectroscopy
Catalog Number: 2695,4213
Patrick Thaddeus 1398

Catalog Number: 98679,35431
David Keith 3221
Catalog Number: 4033,3514
James R. Rice 7270 (on leave fall term)

*Applied Physics 351,352. Statistical and Condensed Matter Theory
Catalog Number: 3992,3993
Paul C. Martin 2103

*Applied Physics 355,356. Special Topics in Theoretical Engineering
Catalog Number: 4864,9197
Michael P. Brenner 4101

*Applied Physics 357,358. Nanophotonics
Catalog Number: 3865,5593
Kenneth B. Crozier 5146

Catalog Number: 5760,3525
Eric Mazur 7952

*Applied Physics 361,362. Photonics, Quantum Devices and Nanostructures
Catalog Number: 9431,9506
Federico Capasso 4571 (on leave spring term)

Catalog Number: 8975,7242
David A. Weitz 2497

Catalog Number: 9195,0425
Venkatesh Narayanamurti 5445 (on leave 2012-13)

*Applied Physics 367,368. Topics on Condensed Matter Physics
Catalog Number: 6975,4173
David R. Nelson 5066 (on leave spring term)

*Applied Physics 369,370. Experimental Condensed Matter: Synchrotron X-Ray Scattering Studies of Interfacial Phenomena ( Liquids and Solid)
Catalog Number: 2442,7532
Peter S. Pershan 1105 (on leave fall term)

*Applied Physics 371,372. Biological Physics and Quantitative Biology
Catalog Number: 6003,9040
Daniel Joseph Needleman 6151
2012-2013 Previous Courses of Instruction

*Applied Physics 373,374. Signaling Processing and Systems Biology  
Catalog Number: 59715,74822  
Sharad Ramanathan 6015

*Applied Physics 383,384. Topics in Atmospheric and Climate Dynamics  
Catalog Number: 3214,3221  
Zhiming Kuang 5285

*Applied Physics 387,388. Climate Dynamics and Physical Oceanography  
Catalog Number: 3549,8599  
Eli Tziperman 4748

Catalog Number: 1164,5559  
Vinothan N. Manoharan 5251

*Applied Physics 393,394. Experimental Studies of Interfaces and Surfaces  
Catalog Number: 1331,5451  
Cynthia M. Friend 7446

*Applied Physics 395,396. Topics in Materials Science  
Catalog Number: 4012,5003  
Michael J. Aziz 1337

*Applied Physics 397,398. Materials Science  
Catalog Number: 4266,5010  
Frans A. Spaepen 4991 (on leave spring term)

Archaeology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Archaeology

Michael McCormick, Francis Goelet Professor of Medieval History (Chair)  
Ruth Bielfeldt, Assistant Professor of History of Art and Architecture  
Suzanne P. Blier, Allen Whitehill Clowes Professor of Fine Arts and Professor of African and African American Studies  
David L. Carrasco, Neil L. Rudenstine Professor for the Study of Latin America in the Faculty of
Divinity and the Faculty of Arts and Sciences (on leave spring term)
Susanne Ebbinghaus, George M.A. Hanffmann Curator of Ancient Art
William L. Fash, Bowditch Professor of Central American and Mexican Archaeology and Ethnology (on leave 2012-13)
Rowan K. Flad, Professor of Anthropology
Joseph Greene, Assistant Director of the Semitic Museum
Ioli Kalavrezou, Dumbarton Oaks Professor of Byzantine Art
C. C. Lamberg-Karlovsky, Stephen Phillips Professor of Archaeology and Ethnology
Matthew Joseph Liebmann, Associate Professor of Anthropology
Peter Machinist, Hancock Professor of Hebrew and Other Oriental Languages
Peter Der Manuelian, Philip J. King Professor of Egyptology
Richard H. Meadow, Senior Lecturer on Anthropology
Laura S. Nasrallah, Professor of New Testament and Early Christianity (Divinity School)
Kimberley C. Patton, Professor of the Comparative and Historical Study of Religion (Divinity School)
Jeffrey Quilter, Senior Lecturer on Anthropology
Adrian Staehli, Professor of Classical Archaeology
Piotr Steinkeller, Professor of Assyriology
Noreen Tuross, Landon T. Clay Professor of Scientific Archaeology
Jason A. Ur, John L. Loeb Associate Professor of the Social Sciences
Gary Urton, Dumbarton Oaks Professor of Pre-Columbian Studies

The Committee on Archaeology is a multidisciplinary group of scholars appointed to promote the teaching of archaeology at Harvard and advance knowledge of archaeological activity, research, fieldwork, and techniques in the many and varied fields where archaeology is employed as an approach to past cultures and histories around the world. Archaeology can be seen as the study of past human societies through the recovery, analysis, and interpretation of material remains. Those who practice archaeology employ a wide range of methods, techniques, and theoretical orientations drawn from across the spectrum of academic disciplines to further their specific intellectual goals. Likewise, scholars of many disciplines who do not consider themselves to be practicing archaeologists nevertheless use the results of archaeological work in their teaching and research.

The teaching of archaeology at Harvard is centered in four departments (programs thereof): Anthropology (Archaeology), The Classics (Classical Archaeology), History of Art and Architecture, and Near Eastern Languages and Civilizations (Ancient Near Eastern and Biblical Studies), although a number of other departments, as well as the Core Curriculum and General Education, also have courses whose instructors integrate archaeological subject matter into their offerings.

The listing below is a compilation of courses in which the practice of archaeology is taught or the use of archaeological information is integral. The interested student is urged to consult the full listings of the various departments for related courses, relevant undergraduate tutorials, and graduate-level reading courses. The courses listed below are ordinarily acceptable for the Secondary Field in Archaeology with the approval of the Secondary Field Adviser. Additional
courses including courses in other departments may also be deemed acceptable. See the Standing Committee’s iSite for information about the Secondary Field in Archaeology.

General Education

Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes–Culture, History, and Beliefs in Andean South America
Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt
Societies of the World 40 (formerly Anthropology 1174). The Incas: The Last Great Empire of Pre-Columbian South America
[Societies of the World 41 (formerly History 1050). Medieval Europe]

Freshman Seminars

*Freshman Seminar 30g. Digging Up the Past: Harvard and Egyptian Archaeology - (New Course)
*Freshman Seminar 39e. Rome and China - (New Course)

African and African American Studies

[African and African American Studies 174. The African City]

Anthropology

*Anthropology 91xr (formerly Anthropology 91r). Supervised Reading and Research in Archaeology
*Anthropology 92xr (formerly Anthropology 92r). Archaeological Research Methods in Museum Collections
Anthropology 1010. The Fundamentals of Archaeological Methods & Reasoning
Anthropology 1025r (formerly Anthropology 1025). Museum Anthropology, Thinking with Objects: Kayaks: Seminar
Anthropology 1032. The Dawn of Mesoamerican Civilization - (New Course)
Anthropology 1035. Human Roots: Paleolithic Archaeology of the Old World - (New Course)
Anthropology 1045. Ancient Settlement Systems: Seminar
Anthropology 1060. Archaeological Science
Anthropology 1065. The Ancient Near East
[Anthropology 1080. North American Archaeology: Lost Tribes and Ancient Capitals of North America]
[Anthropology 1085. Six Great Discoveries in New World Archaeology]
Anthropology 1090. Ethnography and Archaeology
Anthropology 1095 (formerly Social Analysis 50). Urban Revolutions: Archaeology and the Investigation of Early States
[Anthropology 1125. The Moche of Ancient Peru: Politics, Economy, Religion and Art]
[Anthropology 1130. Archaeology of Harvard Yard]
[Anthropology 1131. Archaeology of Harvard Yard II: Laboratory Methods and Analysis]
[Anthropology 1150. Ancient Landscapes]
Anthropology 1155. Before Baghdad: Cities of Ancient Mesopotamia
Anthropology 1165. Digging the Glyphs: Adventures in Decipherment
[Anthropology 1175. The Archaeology of Ethnicity]
Anthropology 1190. Encountering the Conquistadors
[Anthropology 1210. The Archaeology of Ancient China]
Anthropology 1214. The Archaeology of Women and Children - (New Course)
Anthropology 1250. The Pyramids of Giza: Technology, Archaeology, History: Seminar
*Anthropology 2000. Osteoarchaeology Lab
Anthropology 2010ar. Materials in Ancient Societies: Metals
Anthropology 2010br. Materials in Ancient Societies: Metals
[*Anthropology 2020. GIS and Spatial Analysis in Archaeology]
Anthropology 2036. Cornerstones: Lithics in Evolutionary Contexts - (New Course)
[Anthropology 2062. Religions of Latin America]
[*Anthropology 2070a. Archaeological Method and Theory: Seminar]
[Anthropology 2070b. Case Studies and Research Proposal Preparation]
[Anthropology 2085. Archaeology of Ritual and Religion]
[Anthropology 2090. Economic Archaeology: Culture Contact]
[Anthropology 2092. Early China: Archaeology and Texts]
[Anthropology 2177 (formerly Anthropology 1177). South American Archaeology]
[Anthropology 2210. Archaeology and the Ancient Economy]
Anthropology 2240. Archaeology of Production: Seminar
Anthropology 2250a. Proseminar in Archaeology
[Anthropology 2250b. Proseminar in Archaeology]

The Classics

[Classical Archaeology 101. Roman Antiquity] - (New Course)
Classical Archaeology 158. Ancient Sculpture: Display, Perception, and Context - (New Course)
Classical Archaeology 250. Caesar’s Salad: Roman Art During the Decline of the Roman Republic and At the Dawn of a New Empire: Seminar

History

[*History 80e. From Gaul to France: The History, Archaeology and Science of the Fall of the Roman Empire]
[*History 80f. Carolingian Civilization]
History 1011. The World of the Roman Empire
[History 1012. Identity in Classical Antiquity]
[History 1040. The Fall of the Roman Empire]
[History 1041 (formerly Historical Study B-13). Charlemagne and the Birth of Medieval Civilization]
History 1940. Science and the Global Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)
[History 2055hf (formerly History 2055). Early Medieval History: Communications in the Early Medieval Mediterranean: Seminar]

History of Art and Architecture

[History of Art and Architecture 13x. Introduction to Greek and Roman Sculpture]
*History of Art and Architecture 100r. Sophomore Excursion Course
[History of Art and Architecture 132e. The Ideal of the Everyday in Greek Art]
[History of Art and Architecture 137p. The Roman Dinner Party: Proseminar]
History of Art and Architecture 139j. Greek Myths on Roman Sarcophagi
[History of Art and Architecture 141k. Rome, Constantinople, Ravenna in the Light of Imperial Rule: Proseminar]
[History of Art and Architecture 143r (formerly *History of Art and Architecture 143m). The Art of the Court of Constantinople: Proseminar]
[History of Art and Architecture 197. The Imperial Arts of the Inca and the Aztec]
[*History of Art and Architecture 206. Science and the Practice of Art History]
*History of Art and Architecture 240r. Topics in Byzantine Art: Illustrating the Word: manuscripts and their images from the Byzantine religious and secular world

History of Science

[History of Science 186. Technology in the Social World]

Human Evolutionary Biology

Human Evolutionary Biology 1411. Evolution and Adaptation of the Human Diet
Human Evolutionary Biology 1419. Laboratory Methods in Human Evolutionary Biology - (New Course)
Human Evolutionary Biology 1423. Human Origins and Evolution - (New Course)
Human Evolutionary Biology 1490r. Primate Evolution
Human Evolutionary Biology 1530. Hominid Paleontology and Evolution
Human Evolutionary Biology 1540. Human Migration - (New Course)
Human Evolutionary Biology 1940. Science and the Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)

Near Eastern Languages and Civilizations

Ancient Near East 100. History of the Ancient Near East:
Ancient Near East 102. Introduction to Mesopotamian Religion
[Ancient Near East 104. Babylon]
Ancient Near East 107. History and Historiography in the Ancient Near East
[ Ancient Near East 155r. Ancient Mesopotamia: Archaeology and Texts]
Ancient Near East 228. The History and Archaeology of Jerusalem - (New Course)
Ancient Near East 230. Ethnicity and Boundary Maintenance in Ancient Israel of the Iron I Period: Israelites, Philistines and Canaanites - (New Course)
Jewish Studies 138. The Synagogue and Jewish Community - (New Course)

The Study of Religion

*Religion 1305. Emerging Topics in Greek Religion
Religion 1418. The Apostle Paul: His Letters, His Cities, and His Legacy

Architecture, Landscape Architecture and Urban Planning

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on the Degree of Doctor of Philosophy in Architecture, Landscape Architecture, and Urban Planning

K. Michael Hays, Eliot Noyes Professor in Architectural Theory (Design School) (Co-Chair)
Antoine Picon, G. Ware Travelstead Professor of the History of Architecture and Technology (Design School) (Co-Chair)
Eve Marion Blau, Adjunct Professor of the History of Urban Form (Design School)
Svetlana Boym, Curt Hugo Reisinger Professor of Slavic Languages and Literatures and Professor of Comparative Literature
Neil Brenner, Professor of Urban Theory (Design School)
Giuliana Bruno, Professor of Visual and Environmental Studies
Lizabeth Cohen, Howard Mumford Jones Professor of American Studies and Dean of the Radcliffe Institute for Advanced Study (on leave 2012-13)
Diane Emily Davis, Professor of Urbanism and Development (Design School)
Peter L. Galison, Joseph Pellegrino University Professor
Timothy Worrall Hyde, Associate Professor of Architecture (Design School)
Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies at the John F. Kennedy School of Government (Kennedy School)
Jerold Kayden, Frank Backus Williams Professor of Urban Planning and Design (Design School)
Sanford Kwinter, Visiting Associate Professor of Architecture (Design School)
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Erika Naginski, Associate Professor of Architectural History (Design School)
Alina A. Payne, Professor of History of Art and Architecture *(on leave spring term)*
A. Hashim Sarkis, Aga Khan Professor of Landscape Architecture and Urbanism in Muslim Societies *(Design School)*
Christine Smith, Robert C. and Marian K. Weinberg Professor of Architectural History *(Design School)*

*Other Faculty Offering Instruction in Architecture, Landscape Architecture, and Urban Planning*

Alan Altshuler, Harvard University Distinguished Service Professor *(Kennedy School, Design School)*
Mario Biagioli
Susan S. Fainstein, Term Professor of Urban Planning *(Design School)*
Richard T. T. Forman, Professor of Advanced Environmental Studies in the Field of Landscape Ecology *(Design School)*
José A. Gomez-Ibânez, Derek Bok Professor of Urban Planning and Public Policy *(Kennedy School, Design School)*
Neil Levine, Emmet Blakeney Gleason Professor of History of Art and Architecture *(on leave full term)*
Gülru Necipoglu-Kafadar, Aga Khan Professor of Islamic Art
Katharine Park, Samuel Zemurray, Jr. and Doris Zemurray Stone Radcliffe Professor of the History of Science *(on leave 2012-13)*
John R. Stilgoe, Robert and Lois Orchard Professor in the History of Landscape Development *(on leave 2012-13)*

The PhD in Architecture, Landscape Architecture, and Urban Planning is administered by a joint committee of the Faculty of Design and of the Faculty of Arts and Sciences. The program is intended for persons who wish to enter careers in scholarship and advanced research as distinct from the professional practice of architecture, landscape architecture, or urban planning.

Students must master a major area of their field and achieve a thorough grounding (equivalent to one year of full-time study) in the theory and methods of one of the arts and sciences related to their major subject, such as fine arts, history, philosophy, or sociology. Major areas of study include the history and theory of architecture, landscape architecture and urban form from antiquity to the present; or the analysis and development of cities, landscapes, and regions with emphasis on social, economic, ecological, transportation, and infrastructural systems.

Applicants must show evidence of distinguished work at the bachelor’s or master’s level, and should indicate their major subject of interest and the department of the Faculty of Arts and Sciences in which they will carry out their minor discipline.

The Harvard Design School also offers a separate, three-year program leading to the Doctor of Design degree, which is oriented to the practice of architecture, landscape architecture, and urban design. This program requires a separate and different application. For information, contact the Admissions Office, Harvard University, Graduate School of Design, 48 Quincy Street, Cambridge, MA 02138. The phone number is 617-495-5453.
Graduate Courses of Reading and Research

*Design 300. Reading and Research in Architecture, Landscape Architecture, or Urban Planning
Catalog Number: 6076
Alan Altshuler (Kennedy School, Design School) 3541, Mario Biagioli 1756, Eve Marion Blau (Design School) 5078, Svetlana Boym 1926, Giuliana Bruno 2658, Lizabeth Cohen 3627 (on leave 2012-13), Susan S. Fainstein (Design School) 5504, Richard T. T. Forman (Design School) 1207, José A. Gomez-Ibáñez (Kennedy School, Design School) 4586, K. Michael Hays (Design School) 2759, Jerold Kayden (Design School) 2442, Neil Levine 4178 (on leave fall term), Gülru Necipoğlu-Kafadar 1688, Katharine Park 2974 (on leave 2012-13), Alina A. Payne 4605 (on leave spring term), Antoine Picon (Design School) 4295, A. Hashim Sarkis (Design School) 4594, Christine Smith (Design School) 2445, and John R. Stilgoe 8032 (on leave 2012-13)

*Design 304. Direction of Doctoral Dissertations in Architecture
Catalog Number: 2503
Mario Biagioli 1756, Eve Marion Blau (Design School) 5078, Giuliana Bruno 2658, Peter L. Galison 3239, K. Michael Hays (Design School) 2759, Neil Levine 4178 (on leave fall term), Gülru Necipoğlu-Kafadar 1688, Alina A. Payne 4605 (on leave spring term), Antoine Picon (Design School) 4295, A. Hashim Sarkis (Design School) 4594, Christine Smith (Design School) 2445, and John R. Stilgoe 8032 (on leave 2012-13)

*Design 307. Direction of Doctoral Dissertations in Landscape Architecture
Catalog Number: 7028
Richard T. T. Forman (Design School) 1207, K. Michael Hays (Design School) 2759, Gülru Necipoğlu-Kafadar 1688, and John R. Stilgoe 8032 (on leave 2012-13)

*Design 310. Direction of Doctoral Dissertations in Urban Planning
Catalog Number: 5219
Alan Altshuler (Kennedy School, Design School) 3541, Lizabeth Cohen 3627 (on leave 2012-13), Susan S. Fainstein (Design School) 5504, José A. Gomez-Ibáñez (Kennedy School, Design School) 4586, Jerold Kayden (Design School) 2442, and A. Hashim Sarkis (Design School) 4594

Asian Studies Programs

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Council on Asian Studies
Arthur Kleinman, Esther and Sidney Rabb Professor of Anthropology in the Faculty of Arts and Sciences and Professor of Medical Anthropology in the Faculty of Medicine, Harvard College Professor (Chair) (on leave spring term)

Michael J. Puett, Walter C. Klein Professor of Chinese History (Acting Chair, spring term)

Ryuichi Abe, Reischauer Institute Professor of Japanese Religions

William P. Alford, Henry L Stimson Professor of Law (Law School)

Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures

Theodore C. Bestor, Reischauer Institute Professor of Social Anthropology

Homi K. Bhabha, Anne F. Rothenberg Professor of the Humanities

Barry R. Bloom, Harvard University Distinguished Service Professor and Joan L. and Julius H. Jacobson Professor of Public Health (Public Health)

Peter K. Bol, Charles H. Carswell Professor of East Asian Languages and Civilizations

Sugata Bose, Gardiner Professor of Oceanic History and Affairs

Mary C. Brinton, Reischauer Institute Professor of Sociology

James K. M. Cheng, Librarian of the Harvard-Yenching Library

Diana L. Eck, Fredrie Wertham Professor of Law and Psychiatry in Society

Carter J. Eckert, Yoon Se Young Professor of Korean History (on leave spring term)

Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History (on leave fall term)

Rowan K. Flad, Professor of Anthropology

Byron J. Good, Professor of Medical Anthropology in the Department of Social Medicine (Medical School)

Mary-Jo Del Vecchio Good, Professor of Global Health and Social Medicine (Medical School)

Andrew Gordon, Lee and Juliet Folger Fund Professor of History

Susan Greenhalgh, Professor of Anthropology

Janet Gyatsos, Hershey Professor of Buddhist Studies (Divinity School)

Helen Hardacre, Reischauer Institute Professor of Japanese Religions and Society

Michael Herzfeld, Ernest E. Monrad Professor of the Social Sciences (on leave spring term)

David Howell, Professor of Japanese History

William C. Hsiao, K.T. Li Professor of Economics (Public Health)

C.-T. James Huang, Professor of Linguistics

Wesley M. Jacobsen, Professor of the Practice of the Japanese Language and Director of the Japanese Language Program

Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies at the John F. Kennedy School of Government (Kennedy School)

Tarun Khanna, Jorge Paulo Lemann Professor (Business School)

Ju Yon Kim, Assistant Professor of English

Sun Joo Kim, Harvard-Yenching Professor of Korean History

William C. Kirby, T. M. Chang Professor of China Studies and Spangler Family Professor of Business Administration

Shigehisa Kuriyama, Reischauer Institute Professor of Cultural History

Wai-ye Li, Professor of Chinese Literature

Yukio Lippit, Professor of History of Art and Architecture (on leave 2012-13)

Roderick Macfarquhar, Leroy B. Williams Professor of History and Political Science, Emeritus (on leave fall term)

David McCann, Korea Foundation Professor of Korean Literature (on leave fall term)
Michael B. McElroy, Gilbert Butler Professor of Environmental Studies
Ian J. Miller, Associate Professor of History (on leave 2012-13)
Anne E. Monius, Professor of South Asian Religions (Divinity School)
Robert D. Mowry, Senior Lecturer on History of Art and Architecture and Alan J. Dworksy Curator of Chinese Art (Sackler Museum)
Stephen Owen, James Bryant Conant University Professor (on leave fall term)
Elizabeth J. Perry, Henry Rosovsky Professor of Government
Susan J. Pharr, Edwin O. Reischauer Professor of Japanese Politics
J. Mark Ramseyer, Professor of Japanese Legal Studies (Law School)
James Robson, Professor of East Asian Languages and Civilizations (on leave 2012-13)
Dani Rodrik, Rafiq Hariri Professor of International Political Economy at the John F Kennedy School Government (Kennedy School)
Anthony Saich, Daewoo Professor of International Affairs at the John F Kennedy School of Government (Kennedy School)
Mary M. Steedly, Professor of Anthropology
Ajantha Subramanian, Professor of Anthropology
Jeannie Chi Young Suk, Professor of Law (Law School)
Michael A. Szonyi, Professor of Chinese History
Hue-Tam Ho Tai, Kenneth T. Young Professor of Sino-Vietnamese History
Karen Thornber, Professor of Comparative Literature (on leave spring term)
Xiaofei Tian, Professor of Chinese Literature
Leonard W. J. van der Kuijp, Professor of Tibetan and Himalayan Studies
Charles A. Waldheim, John E. Irving Professor of Landscape Architecture (Design School)
David Der-Wei Wang, Edward C. Henderson Professor of Chinese Literature
Eugene Wang, Abby Aldrich Rockefeller Professor of Asian Art (on leave fall term)
Martin K. Whyte, John Zwaanstra Professor of International Studies and of Sociology (on leave spring term)
Michael Witzel, Wales Professor of Sanskrit
Richard K. Wolf, Professor of Music (on leave 2012-13)
Mark Wu, Assistant Professor of Law (Law School)
Tomiko Yoda, Takashima Professor of Japanese Humanities
Alexander Nikolas Zahlten, Assistant Professor of East Asian Languages and Civilizations

The Council on Asian Studies was created by resolutions of the Faculty of Arts and Sciences of April 12, 1972, and April 25, 2001. It exists to coordinate, advise, and promote teaching and research on Asia. It is comprised of faculty members from different departments of the FAS and from several schools of the University who study East Asia, Southeast Asia, South Asia, and Inner Asia. It oversees or advises several academic programs mentioned below, and it provides faculty oversight to the Harvard University Asia Center.

The AM program in Regional Studies—East Asia is supervised by the Council and is described below.

The AB Concentration in East Asian Studies is advised and supported by the Council, and is described under East Asian Languages and Civilizations. Courses on East Asian languages, early history, literature, and thought are listed under East Asian Languages and Civilizations.
Programs in South Asian Studies and in Inner Asian and Altaic Studies are advised and supported by the Council and are listed separately in the catalog.


The Harvard University Asia Center was created in 1997. Its Steering and Executive Committees are drawn from the Faculty of the Council on Asian Studies. The Center coordinates and supports research, teaching, and public programs on Asia throughout the University. The Center sponsors lectures, seminars, and conferences; supports faculty and student research; publishes books and journals; funds research and travel grants to undergraduate and graduate students; administers Harvard’s National Resource Center for East Asian Studies, and manages the competition for Title VI Foreign Language and Area Studies Fellowships for graduate and professional students. The Center publishes a bi-weekly calendar of events during the Academic Year. The Asia Center is located at the Center for Government and International Studies (CGIS), 1730 Cambridge Street, room S113.

**Faculty of the Standing Committee on the Degree of Master of Arts in Regional Studies-East Asia**

Michael A. Szonyi, Professor of Chinese History *(Chair)*  
Andrew Gordon, Lee and Juliet Folger Fund Professor of History  
Susan Greenhalgh, Professor of Anthropology  
Nicholas H. Harkness, Assistant Professor of Anthropology  
Karen Thornber, Professor of Comparative Literature *(on leave spring term)*  
Tomiko Yoda, Takashima Professor of Japanese Humanities

The program in Regional Studies—East Asia, leading to a Master of Arts degree, is a basic preparation (1) for students who intend to go on to PhD work in an East Asian specialization; and (2) for students who wish to equip themselves for nonacademic work. The program, which normally requires two years for completion, aims to make the student broadly conversant with the societies of the region, and also to give him or her a sound knowledge of one of the languages of the area. Details may be obtained from the Committee’s offices at 1730 Cambridge Street, Cambridge, MA, 02138 or 617-495-3777.

**Faculty of the Standing Committee on the Degree of Doctor of Philosophy in History and East Asian Languages**

Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History *(Chair) (on leave fall term)*  
Peter K. Bol, Charles H. Carswell Professor of East Asian Languages and Civilizations  
Carter J. Eckert, Yoon Se Young Professor of Korean History *(on leave spring term)*  
Andrew Gordon, Lee and Juliet Folger Fund Professor of History  
David Howell, Professor of Japanese History
Sun Joo Kim, Harvard-Yenching Professor of Korean History
William C. Kirby, T. M. Chang Professor of China Studies and Spangler Family Professor of Business Administration
Shigehisa Kuriyama, Reischauer Institute Professor of Cultural History
Ian J. Miller, Associate Professor of History (on leave 2012-13)
Michael J. Puett, Walter C. Klein Professor of Chinese History
Michael A. Szonyi, Professor of Chinese History
Hue-Tam Ho Tai, Kenneth T. Young Professor of Sino-Vietnamese History

As of 2006, the Standing Committee on the PhD in History and East Asian Languages is not accepting new applications to the program. Interested students should consult the listing for the Department of East Asian Languages and Civilizations under “Degree in History and East Asian Languages” in the Graduate School of Arts and Sciences Handbook.

**Graduate Courses of Reading and Research**

*Regional Studies — East Asia 300. Thesis Research and Writing*
Catalog Number: 4614
Michael Szonyi 4824 and members of the Faculty
Candidates for the A.M. degree in Regional Studies—East Asia may undertake A.M. thesis reading and research in an approved area of their choice under the direction of a member of the Faculty.
Prerequisite: Permission of the faculty member and the Director of Graduate Studies of the RSEA program required. Only one course graded SAT/UNSAT may be used to fulfill the RSEA course requirement.

*Regional Studies — East Asia 399. Reading and Research*
Catalog Number: 92282
Michael Szonyi 4824 and members of the Faculty
Candidates for the A.M. degree in Regional Studies—East Asia may undertake reading and research in an approved area of their choice under the direction of a member of the Faculty.
Prerequisite: Permission of the faculty member and the Director of Graduate Studies of the RSEA program required. Only one course graded SAT/UNSAT may be used to fulfill the RSEA course requirement.

**Astronomy**

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION
Faculty of the Department of Astronomy

Abraham Loeb, Frank B. Baird, Jr. Professor of Science (Chair)
Charles Alcock, Professor of Astronomy
Edo Berger, John L. Loeb Associate Professor of the Natural Sciences
David Charbonneau, Professor of Astronomy (Director of Undergraduate Studies)
Daniel James Eisenstein, Professor of Astronomy
Douglas Finkbeiner, Associate Professor of Astronomy
Alyssa A. Goodman, Professor of Astronomy
Jonathan E. Grindlay, Paine Professor of Practical Astronomy
Lars Hernquist, Mallinckrodt Professor of Astrophysics
Robert P. Kirshner, Clowes Professor of Science (on leave spring term)
John M. Kovac, Assistant Professor of Astronomy and of Physics
Julia C. Lee, Associate Professor of Astronomy
James M. Moran, Donald H. Menzel Professor of Astrophysics
Ramesh Narayan, Thomas Dudley Cabot Professor of the Natural Sciences (Director of Graduate Studies)
Dimitar D. Sasselov, Professor of Astronomy (on leave fall term)
Irwin I. Shapiro, Timken University Professor
Alicia M. Soderberg, Assistant Professor of Astronomy
Christopher Stubbs, Professor of Physics and of Astronomy, Harvard College Professor

Other Faculty Offering Instruction in the Department of Astronomy

Sean M. Andrews, Lecturer on Astronomy
Raymond Blundell, Lecturer on Astronomy
Steven Robert Cranmer, Lecturer on Astronomy
Alexander Dalgarno, Phillips Professor of Astronomy, Emeritus
Thomas M. Dame, Lecturer on Astronomy
Rosanne Di Stefano, Lecturer on Astronomy
Martin S. Elvis, Lecturer on Astronomy
Daniel G. Fabricant, Lecturer on Astronomy
Giovanni G. Fazio, Lecturer on Astronomy
Christine Jones Forman, Lecturer on Astronomy
William R. Forman, Lecturer on Astronomy
Anna Frebel, Lecturer on Astronomy
Lincoln J. Greenhill, Lecturer on Astronomy and Senior Research Fellow
Matthew Holman, Lecturer on Astronomy
Justin C. Kasper, Lecturer on Astronomy
David W. Latham, Lecturer on Astronomy
Jeffrey E. McClintock, Lecturer on Astronomy
Soren Christian Dalgaard Meibom, Lecturer on Astronomy
Ruth Ann Murray-Clay, Lecturer on Astronomy
Philip M. Sadler, Frances W Wright Senior Lecturer on Celestial Navigation in the Department of Astronomy
Patrick O. Slane, Lecturer on Astronomy
Howard A. Smith, Lecturer on Astronomy
Patrick Thaddeus, Robert Wheeler Willson Professor of Applied Astronomy, Emeritus
David J. Wilner, Lecturer on Astronomy
Qizhou Zhang, Lecturer on Astronomy

Astronomy 16 provides an introduction to stellar and planetary astrophysics, and Astronomy 17 provides an introduction to galactic and extragalactic astrophysics. Both courses use single-variable calculus and some introductory mechanics. Together these two courses, which may be taken in either order, provide a complete introductory survey of astrophysics. Astronomy 16 and 17 form the foundation for both the secondary field and the concentration in astrophysics. Both courses receive Gen Ed credit. Students interested in an introduction to the methods of observational astrophysics are encouraged to consider Astronomy 100, which includes a trip to use the telescopes located at the F. L. Whipple Observatory in Arizona. Astronomy 98 is a research tutorial intended for students pursuing the astrophysics concentration or secondary field, although this course is open in special cases to concentrators in related fields. Students interested in substantial independent research during their senior year should consider Astronomy 99, leading to the senior thesis. Astronomy 110, 120, 130, 150, 151, 191, 192, and 193 each offer the opportunity for study of a particular field of astrophysics. Each of these courses requires preparation in mathematics and physics.

Students interested in an introduction to astronomy that presumes no mathematical preparation above the level of high school algebra should consider SPU 19, SPU 21, SPU 22, SPU 30, and Astronomy 2. These courses use a variety of approaches aimed at introducing the key concepts that address some of the great questions of astronomy.

**Primarily for Undergraduates**

**Astronomy 2. Celestial Navigation**
Catalog Number: 2179 Enrollment: Limited to 30.
Philip M. Sadler
Half course (fall term). Tu., 11:30-1:30, Tu., 7-10 pm. EXAM GROUP: 13, 14, 15, 18
Never be lost again! Find your way on sea, land, or air by employing celestial and terrestrial techniques. Acquire expertise in using navigators’ tools (sextant, compass, and charts) while learning the steps to the celestial dance of the sun, moon, stars, and planets. This 108-year-old course continues to rely on practical skills and collaborative problem-solving, while utilizing historical artifacts (instruments, maps, captains’ logs) and student-built devices. Culminating in a day-long cruise to practice navigation skills.
*Note:* Minimal lecturing; predominantly practical activities with individual attention from teaching staff. Math beyond high school trigonometry and geometry unnecessary.

**Astronomy 16. Stellar and Planetary Astronomy**
Catalog Number: 8813
David Charbonneau
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
This course provides an introduction to the physical principles describing the formation and evolution of stars and their planetary companions. Topics include thermal radiation and stellar
spectra; telescopes; energy generation in stars; stellar evolution; orbital dynamics; the Solar system; and exoplanets. This course includes an observational component: students will determine the distance to the Sun, and use the Clay Telescope atop the Science Center to study stellar evolution and detect exoplanets.

**Note:** This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.

**Prerequisite:** An introductory course in mechanics, which may be taken concurrently, satisfied by Physics 11a, or Physics 15a, or Physics 16.

**Astronomy 17. Galactic and Extragalactic Astronomy**
Catalog Number: 22304
Daniel James Eisenstein

*Half course (fall term). M., W., 2:30–4; . EXAM GROUP: 7, 8*

This course provides an introduction to the physical principles describing galaxies and the composition and evolution of the Universe. Topics include the interstellar medium; star clusters; the structure and dynamics of the Milky Way; other galaxies; clusters of galaxies; active galaxies and quasars; cosmology; and the early universe. This course includes an observational component: In addition to observing galaxies with the Science Center Clay Telescope, students will use the millimeter-wavelength telescope at the Harvard-Smithsonian Center for Astrophysics to measure the rotation velocity of the Milky Way galaxy and to determine its mass.

**Note:** This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.

**Prerequisite:** An introductory course in mechanics, which may be taken concurrently, satisfied by Physics 11a, or Physics 15a, or Physics 16.

**Astronomy 91r. Supervised Reading and Research**
Catalog Number: 1545
Abraham Loeb and members of the Department

*Half course (fall term; repeated spring term). Hours to be arranged.*

Supervised reading and research in a subject of astrophysics that is not normally included in the regular course offerings of the department.

**Note:** Students must arrange for course supervision with an individual member of the Department. The course may be counted only once toward the concentration requirements, and may not be taken more than twice.

**Prerequisite:** Astronomy 16 or Astronomy 17.

**Astronomy 98. Research Tutorial in Astrophysics**
Catalog Number: 3121
Douglas Finkbeiner and members of the Department

*Half course (spring term). M., 4–5:30; Tu., 5:30–7:30 p.m. EXAM GROUP: 9, 18*

This tutorial introduces students to research at the forefront of astrophysics, and provides opportunities for students to meet with research scientists and individuals active in science policy, education, and journalism. Students meet weekly for a lecture and discussion over dinner with a guest speaker, preceded by a reading and a preparatory seminar. Students will be mentored throughout the term on a research project of their choosing. The Harvard-Smithsonian
Center for Astrophysics is home to one of the largest groups of astronomers in the world, providing extensive opportunities for undergraduate research.  

*Note:* Open to students pursuing the concentration or secondary field in astrophysics, and in special cases to concentrators in other physical sciences.  

*Prerequisite:* Astronomy 16 or Astronomy 17.

**Astronomy 99. Senior Thesis in Astrophysics**  
Catalog Number: 5413  
*James M. Moran and members of the Department*  
*Full course. Hours to be arranged.*  
For honors candidates in Astrophysics. Individually supervised reading and research leading to the senior thesis. The Harvard-Smithsonian Center for Astrophysics is home to one of the largest groups of astronomers in the world, providing extensive opportunities for undergraduate research.  

*Prerequisite:* Astronomy 98.

**Cross-listed Courses**

**Earth and Planetary Sciences 52. Introduction to Global Geophysics - (New Course)**  
[Empirical and Mathematical Reasoning 19 (formerly Quantitative Reasoning 46). The Art of Numbers]  
**Science of the Physical Universe 21 (formerly Science A-36). Stellar Understanding of the Cosmos**  
**Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the Brontosaurus and Beyond**  
**Science of the Physical Universe 30 (formerly Science A-54). Life as a Planetary Phenomenon**

**For Undergraduates and Graduates**

**Astronomy 100. Methods of Observational Astronomy**  
Catalog Number: 95134  
*Edo Berger*  
*Half course (spring term). W., 12–2, F., 2–4. EXAM GROUP: 5, 6, 7, 8*  
In this course we will learn the basic tools of modern astronomical research, including telescopes, detectors, imaging, spectroscopy, and common software. Emphasis will be placed on both the theory behind telescopes and their use, and hands-on experience with real data. Using this basic knowledge we will analyze science-level astronomical data from a wide range of telescopes and review the basic properties of stars, galaxies, and other astronomical objects of interest. The course includes a trip to the F. L. Whipple Observatory on Mount Hopkins, Arizona, to gather data with various telescopes.  

*Note:* This course is similar in content to Astronomy 97 (no longer offered). Students who have taken Astronomy 97 may not take Astronomy 100 for credit.  

*Prerequisite:* Astronomy 16 or Astronomy 17, either of which may be taken concurrently.
[Astronomy 110. Exoplanets]
Catalog Number: 43612
David Charbonneau
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
A survey of the rapidly-evolving field of the detection and characterization of planets orbiting other stars. Topics include proto-stellar collapse and star formation; comets, meteorites, and protoplanetary disk structure; models of planet formation; methods of detecting extrasolar planets; composition and physical structure of planets; planetary atmospheres; habitable zones; greenhouse effect; biosignatures.
Note: Expected to be given in 2013–14.
Prerequisite: Astronomy 16.

Astronomy 120. Stellar Physics
Catalog Number: 58719
Alicia M. Soderberg
Half course (spring term). Tu., Th., 11:30–1; M., 7–9 p.m. EXAM GROUP: 13, 14
Stars are the basic building blocks of galaxies and are responsible for the nucleosynthesis of most of the elements. Topics include stellar structure; energy transport in stars; stellar atmospheres; astroseismology; nuclear fusion in stars; stellar evolution; nucleosynthesis of the elements; stellar death and supernovae; the degenerate remnants of stars; black holes. This course will make use of thermodynamics, statistical mechanics, and quantum mechanics, but will review these subjects as necessary.
Note: Offered in alternate years.
Prerequisite: Astronomy 16. Physics 15c strongly recommended.

[Astronomy 130. Cosmology]
Catalog Number: 73826
Douglas Finkbeiner
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
The physical model describing the initial conditions, evolution, and ultimate fate of the Universe. Topics include cosmic dynamics; the Robertson-Walker Metric; curvature; estimating cosmological parameters; the accelerating universe; dark matter; gravitational lensing; the cosmic microwave background; nucleosynthesis; inflation and the very early universe; formation of structure. Note: Offered in alternate years.
Note: Expected to be given in 2013–14.
Prerequisite: Astronomy 17 or Physics 15c.

Astronomy 150. Radiative Processes in Astrophysics
Catalog Number: 8993
Ramesh Narayan
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course offers a survey of radiative processes of astrophysical importance from radio waves to gamma rays. Topics include thermal and non-thermal processes, including bremsstrahlung, synchrotron radiation, and Compton scattering; radiation in plasmas; atomic and molecular spectra.
Note: Open to seniors concentrating in Astrophysics or Physics. Juniors considering this course
should contact the instructor.

*Prerequisite:* Physics 143a.

**[Astronomy 151. Astrophysical Fluid Dynamics]**

Catalog Number: 3025

*Lars Hernquist*

*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*

Fluid and gas dynamics with applications drawn from astrophysical phenomena. Topics include: kinetic theory, diffusive effects, incompressible fluids, inviscid and viscous flows, boundary layer theory, accretion disks, fluid instabilities, turbulence, convection, gas dynamics, linear (sound) waves, method of characteristics, Riemann invariants, supersonic flow, non-linear waves, shocks, similarity solutions, blast waves, radiative shocks, ionization fronts, magnetohydrodynamics, hydromagnetic shocks, dynamos, gravitational collapse, principles of plasma physics, Landau damping, computational approaches, stability criteria, particle based (Lagrangian) methods, adaptive mesh refinement, radiation hydrodynamics.

*Note:* Expected to be given in 2013–14.

**Astronomy 189. Exoplanet Systems - (New Course)**

Catalog Number: 92184 Enrollment:

*Mathew Holman and Ruth Ann Murray-Clay*

*Half course (spring term). M., F., 12:30–2. EXAM GROUP: 5, 6*

Introduction to the formation and dynamical evolution of planetary systems. We will discuss how and where planets form and how their orbits evolve with time, shaping the diversity of planetary systems now observed. Applications will be drawn from extrasolar planetary systems as well as our own solar system.

*Note:* For 2012-13, this course replaces Astronomy 110, which is similar in content. This course will use results from thermodynamics. Supplemental lectures will be offered for students who have not completed Physics 181 or Engineering Sciences 181.

*Prerequisite:* Astronomy 16, and a course in mechanics at the level of Physics 15a or above.

**Astronomy 191. Astrophysics Laboratory**

Catalog Number: 3615

*John M. Kovac and Jonathan E. Grindlay*

*Half course (fall term). F., 2-5, and hours to be arranged. EXAM GROUP: 7, 8, 9*

Laboratory and observational projects in astrophysics. Students design and undertake two projects from a selection including: observational studies of the cosmic microwave background radiation, molecules in interstellar clouds, the rotation of the galaxy, galactic molecular sources with the submillimeter array (SMA), stars and clusters with the Clay Telescope; and laboratory experiments including super-conducting submillimeter detectors, x-ray CCDs, and hard x-ray imaging detectors and telescopes.

*Note:* Primarily for concentrators in astrophysics or combined concentrators with physics. Students with physics as their primary concentration, but with a serious interest in astrophysics, may take this to satisfy their laboratory requirement (in lieu of Physics 191) upon petition to the Head Tutor in Physics.

*Prerequisite:* Astronomy 16 or 17, or Physics 15c or equivalent.
Astronomy 193. Noise and Data Analysis in Astrophysics
Catalog Number: 4495
James M. Moran
Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8
How to design experiments and get the most information from noisy, incomplete, flawed, and biased data sets. Basic of Probability theory; Bernoulli trials: Bayes theorem; random variables; distributions; functions of random variables; moments and characteristic functions; Fourier transform analysis; Stochastic processes; estimation of power spectra: sampling theorem, filtering; fast Fourier transform; spectrum of quantized data sets. Weighted least mean squares analysis and nonlinear parameter estimation. Bootstrap methods. Noise processes in periodic phenomena. Image processing and restoration techniques. The course will emphasize a Bayesian approach to problem solving and the analysis of real data sets.
Note: Offered in alternate years.
Prerequisite: Mathematics 21b or equivalent.

Cross-listed Courses

Applied Mathematics 111. Introduction to Scientific Computing
[Earth and Planetary Sciences 121. Terrestrial Planets]
*Physics 191r. Advanced Laboratory

Primarily for Graduates

These courses are primarily aimed at graduate students in astronomy, although properly prepared undergraduates and graduate students from other fields are welcome. The required graduate core courses are Astronomy 150, 201a and b, and 202a and b, while a wide range of advanced courses is available for further work. Courses may be available as reading courses at times other than those shown, by arrangement with the instructor. Graduate students in Astronomy are required to take one graduate physics course selected from Physics 210 or 251a (or Astronomy 251). More advanced physics courses may be substituted upon petition to the Committee on Academic Studies.

Astronomy 201a. Stellar and Planetary Astrophysics
Catalog Number: 4303
Steven Robert Cranmer
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Stars are the basic building blocks of the universe, and they are responsible for the production of most elements via nucleosynthesis. This course covers the energy generation and transport in stars, stellar atmospheres and radiative transfer, stellar evolution, and asteroseismology. The Sun and its heliosphere are also studied as the closest and best-studied examples of a star and its circumstellar plasma. This course also provides a brief survey of planetary astrophysics, including the dominant processes acting in the interiors and atmospheres of planets in our own solar system and in others.
Note: Offered in alternate years.

Prerequisite: Astronomy 150 (may be taken concurrently).

**Astronomy 201b. Interstellar Medium and Star Formation**
Catalog Number: 4206
Alyssa A. Goodman

*Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*
Nature of the Interstellar Medium (ISM): composition, energetics, densities and interactions; observations and theory. Processes leading to the formation of stars and planets, as well as studies of the feedback on the ISM from stellar deaths.

Note: Offered in alternate years.

**Astronomy 202a. Galaxies and Dynamics**
Catalog Number: 8237
Daniel James Eisenstein

*Half course (fall term). M., W., 9:30–11. EXAM GROUP: 2, 3*
An overview of extragalactic astronomy. Galaxy formation, evolution and properties, galactic dynamics, clustering, gas dynamics, star formation and other topics at the frontiers of extragalactic astronomy.

Note: Expected to be given in 2013–14.

**Astronomy 202b. Cosmology**
Catalog Number: 2446
Abraham Loeb

*Half course (spring term). Tu., Th., 9:30–11. EXAM GROUP: 11, 12*
The cosmological principle: isotropy and homogeneity, cosmological world models, thermal history of the Big Bang, the microwave background, inflation, growth of density fluctuations, large scale structure and other topics at the frontiers of cosmology.

Note: Expected to be given in 2013–14.

**Astronomy 218. Radio Astronomy**
Catalog Number: 2883
James M. Moran

*Half course (fall term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17*
Historical development; diffraction theory of antennas and interferometers; signal detection and measurement techniques. Thermal, synchrotron and spectral-line emission in the context of radio observations of the sun, planets, pulsars, masers, hydrogen clouds, molecular clouds, ionized regions, active galaxies, quasars, and the cosmic background. Observational projects and laboratory exercises carried out with the Submillimeter Array, Haystack Observatory and the CMB Laboratory.

Note: Expected to be given in 2013–14.

Prerequisite: Astronomy 150 or Physics 153 recommended.

**Astronomy 219. High Energy Astrophysics**
Catalog Number: 1858
Edo Berger and Ramesh Narayan
**Half course (spring term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17**
Discussion of relativistic and high-energy astrophysical phenomena and observational techniques. Accretion onto compact stars (white dwarfs, neutron stars, black holes); active galactic nuclei, galaxy clusters. Gamma-ray bursts and cosmic rays. X-ray and gamma-ray background.

*Note:* Expected to be given in 2013–14.

[*Astronomy 224. Solar System Dynamics*]

Catalog Number: 8374
Matthew Holman

**Half course (spring term). Hours to be arranged.**
Introduction to the techniques of modern solar system dynamics, applied to our own solar system as well as to extra solar planetary systems. Research component focuses on applications of solar system dynamics to data from Pan-STARRS-1.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Physics 11a, 15a, or 16.

**Astronomy 251. Quantum Mechanics for Astrophysics**
Catalog Number: 5381
Lars Hernquist

**Half course (fall term). M., W., F., at 10. EXAM GROUP: 3**
Quantum mechanics with applications to atomic and molecular processes important in astronomical environments. Atomic and molecular structure; spectroscopy (selection rules, oscillator strengths, photoionization); scattering theory (elastic, inelastic, approximate methods); line broadening; collision processes (cross sections, rate coefficients) involving electrons, ions, atoms, and molecules.

*Note:* Offered in alternate years.

*Prerequisite:* Physics 143a or the equivalent, or permission of instructor.

**Cross-listed Courses**

**Applied Mathematics 205. Advanced Scientific Computing: Numerical Methods**

[Earth and Planetary Sciences 238. Spectroscopy and Radiative Transfer of Planetary Atmospheres]


**Physics 210. General Theory of Relativity**

**Physics 251a. Advanced Quantum Mechanics I**

**Graduate Courses of Reading and Research**

Unless otherwise specified, these courses are given fall term, repeated spring term.

*Astronomy 300. Topics in Modern Astrophysics*
Catalog Number: 7915
Charles Alcock 5194, Sean M. Andrews 6903, Edo Berger 6027, Raymond Blundell 2753, David Charbonneau 5225, Steven Robert Cranmer 3185, Alexander Dalgarno 1157, Thomas M. Dame

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A seminar, reading, or research course may be arranged with any of the faculty listed. Students can also arrange to obtain Astronomy 300 credit for reading or research with scientific staff members of the Harvard-Smithsonian Center for Astrophysics; consult Astronomy Department office.

*Astronomy 301hf. Journal Club
Catalog Number: 5224
Edo Berger 6027 and Alicia M. Soderberg 6570
Half course (throughout the year). Tu., at 4.
Each week two speakers (faculty, lecturers, and students) will report on current research in astronomy, providing students with an opportunity to practice the organization and presentation of technical material. A minimum of one presentation will be expected from each student each year focused on their own research or new results in the literature. Faculty will similarly discuss recent results from the literature, as well as their own research as a way to provide an overview of research activities at the Harvard Astronomy Department. The course is intended as an opportunity for substantive discussion, as an opportunity to find out about research activities, and to foster interaction between the students and faculty.

*Astronomy 302. Scientists Teaching Science
Catalog Number: 9869
Philip M. Sadler 2231
Learn the secrets of lecturing well, leading discussions, connecting to real-world applications, and creating tests in any scientific discipline as we focus on relevant educational research and case studies, plus engage in practical classroom activities.
Note: Open to graduate students in all areas of science. Assignments help illustrate research findings from life, earth, and physical science education. Undergraduates with an interest in teaching at the pre-college level may be admitted with instructor permission.
Prerequisite: Experience as a teaching fellow or tutor.

Cross-listed Courses

*Statistics 310hfr. Topics in Astrostatistics
Biological Sciences in Dental Medicine

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in Dental Medicine

Bjørn R. Olsen, Hersey Professor of Cell Biology (Medical School) (Chair)
Malcolm Whitman, Professor of Developmental Biology (Dental School) (Vice Chair)
Arkhat Abzhanov, Associate Professor of Organismic and Evolutionary Biology
Roland Elie Baron, Professor of Oral Medicine, Infection, and Immunity (Dental School)
Floyd E. Dewhirst, Professor of Oral Medicine, Infection, and Immunity (Dental School)
Randy King, Harry C. McKenzie Associate Professor of Cell Biology (Medical School)
Henry M. Kronenberg, Professor of Medicine (Medical School)
Beate K. M. Lanske, Associate Professor of Developmental Biology (Dental School)
Andrew B. Lassar, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Yefu Li, Assistant Professor of Developmental Biology (Dental School)
Richard L. Maas, Professor of Medicine (Medical School)
Henry C. Margolis, Associate Professor of Developmental Biology (Dental School)
Mohammed Shawkat Razzaque, Assistant Professor of Oral Medicine, Infection, and Immunity (Dental School)
Vicki Rosen, Professor of Developmental Biology (Dental School)
Gary B. Ruvkun, Professor of Genetics (Medical School)
Charles N. Serhan, Simon Gelman Professor of Anaesthesia (Medical School)
Jagesh V. Shah, Assistant Professor of Systems Biology (Medical School)
Kevin Struhl, David Wesley Gaiser Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Xiu-Ping Wang, Assistant Professor of Developmental Biology (Dental School)
Matthew L. Warman, Harriet M. Peabody Professor of Orthopedic Surgery (Medical School)

Other Faculty Offering Instruction in Dental Medicine

John D. Bartlett, Assistant Professor of Developmental Biology (Dental School)
Patricia A. D’Amore, Professor of Ophthalmology (Pathology) (Medical School)
Daniel Finley, Professor of Cell Biology (Medical School)
David E. Fisher, Edward Wigglesworth Professor of Dermatology (Medical School)
Paul F. Goetinck, Professor of Dermatology, Emeritus (Medical School)
James Hanken, Professor of Biology, Alexander Agassiz Professor of Zoology in the Museum of Comparative Zoology, and Curator of Herpetology
Peter V. Hauschka, Associate Professor of Developmental Biology (Dental School)
Elizabeth D. Hay, Louise Foote Pfeiffer Professor of Embryology in the Department of Cell Biology, Emeritus (Medical School)
Michael Klagsbrun, Patricia A. Donahoe Professor of Surgery (Pathology) (Medical School)
Michael Levin, Visiting Professor of Genetics (Medical School)
Yi-Ping Li, Assistant Professor of Oral Medicine, Infection, and Immunity (Dental School)
Daniel E. Lieberman, Professor of Human Evolutionary Biology, Harvard College Professor (on leave 2012-13)
Bruce J. Paster, Professor of Oral Medicine, Infection, and Immunity (Dental School)
Philip P. Stashenko, Associate Professor of Oral Medicine, Infection, and Immunity (Dental School)
Martin A. Taubman, Professor of Developmental Biology (Dental School)

The Biological Sciences in Dental Medicine (BSDM) Program, leading to the PhD degree combines faculty from the Department of Developmental Biology and other Harvard School of Dental Medicine departments with faculty from basic science departments at Harvard Medical School, and faculty from the Faculty of Arts and Sciences.

This program offers advanced study in the molecular, supramolecular, cellular, and supracellular processes that provide the intellectual basis for dental medicine.

The BSDM program is intended for scholars interested in pursuing a career in basic or patient-oriented science in the areas of skeletal biology, cell biology and development, immunology, or microbiology leading to a PhD degree. Eligible applicants will be individuals with a baccalaureate in sciences (BS), a master degree in sciences, (MS), a doctoral degree in dentistry, (DMD, DDS), or a medical doctoral degree (MD).

**Graduate Courses of Reading and Research**

*Biological Sciences in Dental Medicine 300. Research with Faculty*
Catalog Number: 9825
*Members of the Committee*

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**Biological Sciences in Public Health**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Committee on Higher Degrees in Public Health Sciences*
Michael Grusby, Professor of Molecular Immunology (Public Health) (Chair)

**Faculty of the Subcommittee on the Doctor of Philosophy in Biological Sciences in Public Health**

Marianne Wessling-Resnick, Professor of Nutritional Biochemistry (Public Health) (Chair)
Michael Grusby, Professor of Molecular Immunology (Public Health) (ex officio)
Lester Kobzik, Professor in the Department of Environmental Health (Public Health)
Frank M. Sacks, Professor of Cardiovascular Disease Prevention (Medical School)
Dyann F. Wirth, Richard Pearson Strong Professor of Infectious Disease (Public Health)

**Other Faculty Offering Instruction in Biological Sciences in Public Health**

The FAS Standing Committee on Higher Degrees in Public Health Sciences has the general responsibility of overseeing the existing PhD degree programs in biological sciences and biostatistics and developing new PhD programs in other important domains of public health.

The committee is composed of representatives from the Faculty of Arts and Sciences, the School of Public Health, and the Medical School. The committee membership is drawn from the biological and numeric sciences to reflect the current PhD programs. As new programs are created in the future, members representing other relevant disciplines will be added to the committee.

The committee works with the Subcommittee on the Degree of Doctor of Philosophy in Biological Sciences and the Subcommittee on the Degree of Doctor of Philosophy in Biostatistics to make policy decisions and ensure the continuing strengths of those programs. The committee is also charged with initiating discussion of and planning for additional PhD programs.

The Subcommittee on the Degree of Doctor of Philosophy in Biological Sciences in Public Health (with membership from the Faculty of Arts and Sciences, the Medical School, and the School of Public Health) and the Subcommittee on the Degree of Doctor of Philosophy in Biostatistics (with membership from the Faculty of Arts and Sciences and the School of Public Health) hold responsibility for oversight of their respective programs, including monitoring requirements and standards for the degree and creating standards for admission.

For more courses of interest, see the School of Public Health catalog.

**Primarily for Graduates**

*BPH 201r. Laboratory Rotations*

Catalog Number: 32079
Marianne Wessling-Resnick (Public Health)

Half course (fall term; repeated spring term). Hours to be arranged.

Members of the Division of Biological Sciences offer hands-on experimental methods of research in biological sciences. Students write a paper and give an oral presentation regarding
their 10-week laboratory project.
*Note:* Offered jointly with the School of Public Health as DBS 300.

[BPH 206. Advanced Respiratory Physiology]
Catalog Number: 1049
James Preston Butler (Medical School)
*Half course (fall term). M., W., 9–10:20. EXAM GROUP: 2, 3*
Respiratory measurements are an integral part of public health research. We will critically discuss their scientific bases, noting practical considerations and pitfalls, and their interpretations and inferences about physiological status and disease.
*Note:* Expected to be given in 2013–14. Offered jointly with the School of Public Health as EH 223.
*Prerequisite:* EH 205 or equivalent, or signature of instructor indicating suitable background required. College-level physiology.

[BPH 207. Advanced Topics in Physiology]
Catalog Number: 2146
Daniel J. Tschumperlin (Public Health)
*Half course (spring term). M., W., 8:30–10:20. EXAM GROUP: 1, 2, 3*
This course will focus on the intersection of biomechanics, cell biology and disease, with particular attention to the role the mechanical environment plays in pathogenesis of cardiorespiratory diseases and cancer biology. Current knowledge of the molecular mechanisms underlying mechanotransduction will be emphasized throughout the course. The course will meet twice a week, with one day of lecture and the other dedicated to critical reading and discussion of classic and current primary literature.
*Note:* Offered jointly with the School of Public Health as EH 225.

[BPH 208. Human Physiology]
Catalog Number: 3627
Stephanie A. Shore (Public Health)
*Half course (fall term). M., W., 10:30–12:20. EXAM GROUP: 3, 4, 5*
An introduction to the principles governing function in the human body designed to provide a framework in physiology for future public health researchers and professionals who have not taken college level physiology courses. Emphasis on the concept of homeostasis and on integrative aspects of physiology. Examples of pathophysiology and environmental physiology highlight these processes.
*Note:* Offered jointly with the School of Public Health as EH 205. Required lab.
*Prerequisite:* College-level introductory biology or permission of the instructor.

[BPH 209. Introduction to Computational Genomics for Infectious Disease]
Catalog Number: 87097
Dyann F. Wirth (Public Health)
*Half course (fall term). Hours to be arranged.*
The study of infectious diseases is being revolutionized by the availability of genomic data for many pathogenic organisms. These data include genome sequences and annotation, comparative sequence data and population data, expression data, and metabolic data. For these data to be
maximally useful to infectious disease researchers, familiarity with the appropriate analysis, methods, and concepts must be acquired. This course will be an introduction to computational genomics methods with selected applications to infectious disease.

Note: Offered jointly with School of Public Health and MIT.

**BPH 210. Pathophysiology of Human Disease**  
Catalog Number: 3078  
Lester Kobzik (Public Health)  
*Half course (spring term). M., F., 1:30–3:20. EXAM GROUP: 6, 7*  
Surveys major human disease problems in the cardiovascular, respiratory, hematopoietic, reproductive, and gastrointestinal systems. Emphasis on understanding the pathophysiologic basis of common disease manifestations and the pathogenesis of the disease process.

Note: Offered jointly with the Medical School as BPH 729.0 and with the School of Public Health as EH 208.  
Prerequisite: A college-level human physiology course.

*BPH 212. Cellular and Molecular Biology of Parasites*  
Catalog Number: 0703 Enrollment: Limited to 35.  
Barbara Burleigh (Public Health) and members of the Department  
*Half course (spring term). Hours to be arranged.*  
We cover aspects of biochemistry, cell and molecular biology of protozoan parasites of humans, including: malaria, toxoplasma, leishmania, trypanosomes, amoebae, and giardia. Includes in-depth discussions on comparative mechanisms of pathogenesis; unique parasite biochemistry and organelles; strategies/molecular basis for host immune invasion; bioinformatics approaches to molecular pathogenesis.

Note: Given in alternate years. Offered jointly with the Medical School as BPH 721.0 and with the School of Public Health as IMI 216.  
Prerequisite: Coursework in biochemistry, genetics, or microbiology.

**BPH 215. Principles of Toxicology**  
Catalog Number: 5366  
Vishal S. Vaidya (Medical School)  
*Half course (fall term). M., W., 10:30–12:20. EXAM GROUP: 3, 4, 5*  
Emphasizes mechanisms of injury and clinical consequences following exposures to environmental and occupational chemicals. Examines actions at the molecular, cellular, organ system, and organismal levels. Discusses methods for detecting, evaluating, analyzing, and combating toxic effects.

Note: Offered jointly with the School of Public Health as EH 504.  
Prerequisite: Organic chemistry and mammalian physiology or equivalent.

[*BPH 216. Immunology of Infectious Diseases*]  
Catalog Number: 6938 Enrollment: Limited to 35.  
Samuel M. Behar (Medical School)  
*Half course (spring term). Hours to be arranged.*  
Covers in detail the interactions of pathogens with the host immune system, including innate and protective responses and those immune responses that are deleterious. Topics include: overview
of immune responses; response of mucosal-secretory immune system to pathogens; innate
immunity “the collectins”; innate immunity “Th2 PAMPs”; pathogen regulation of host immune
responses; pathogen evasion of immune effector mechanisms; polarization of CD4+ T helper cell
subsets and relationship to disease outcome; resistance to HIV; HIV and co-infection with other
pathogens; mechanisms of immunopathogenesis; and development of vaccines. Pathogens
covered in detail include: HIV, cholera, TB, staph/strep, toxoplasma, intestinal protozoa, malaria,
and helminths.

Note: Expected to be given in 2013–14. Given in alternate years. Offered jointly with the
Medical School as BPH 724.0 and with the School of Public Health as IMI 208. Each lecture
requires reading several relevant papers and completion of a problem set.

Prerequisite: An immunology course.

**BPH 222, The Science of Human Nutrition**
Catalog Number: 0216
Frank M. Sacks (Medical School, Public Health), Clifford Lo (Medical School, Public Health)
and members of the Department

Half course (spring term). Tu., Th., 1:30–3:20. EXAM GROUP: 15, 16
A review of the biochemistry of carbohydrates, fats, proteins, vitamins, and minerals in the
context of human disease. Contemporary topics are emphasized. Particular emphasis given to
current knowledge of the mechanisms that may explain the role of diet in the causation and/or
prevention of ischemic heart disease, diabetes, obesity, hypertension, and cancer. Recommended
dietary intakes of selected nutrients are discussed in order to understand their limitations.

Note: Offered jointly with the Medical School as BPH 733.0 and with the School of Public
Health as NUT 202.

Prerequisite: Introductory nutrition course. Prior familiarity with nutrition and the health
sciences expected, as well as a basic knowledge of biochemistry and human physiology.

**BPH 225r, Advanced Topics in Biological Sciences in Public Health: Seminar**
Catalog Number: 58162
Marianne Wessling-Resnick (Public Health)

Half course (fall term; repeated spring term). Hours to be arranged.
A series of discussions and seminars each running for a half term (7-8 weeks).

**Graduate Courses of Reading and Research**

**BPH 301 (formerly *BPH 219). Biological Sciences Seminars**
Catalog Number: 1152
Marianne Wessling-Resnick (Public Health)

Half course (fall term). Tu., Th., 9–10:20. EXAM GROUP: 11, 12
Faculty present seminars on their current research in the biological sciences and direct a student
discussion of the logic and experimental design of this research. Topics include chemical and
viral carcinogenesis, DNA damage and repair, immunology, molecular biology, metabolism,
cardiovascular disease, parasitology, and how these areas apply to public health issues.

Note: Required for first-year students in the BPH program. Offered jointly with the School of
Public Health as DBS 205.
*BPH 312. Regulation of the Cellular Uptake of Macromolecular Nutrients  
Catalog Number: 2736  
Marianne Wessling-Resnick (Public Health) 1315

*BPH 315. Molecular Genetic Analysis of Gene Expression and Drug Resistance in Parasitic Protozoan, Including Leishmania and Malaria  
Catalog Number: 2756  
Dyann F. Wirth (Public Health) 2492

*BPH 319. Signaling Mechanisms of Peptide Hormones, Genetic and Molecular Basis of Obesity and Diabetes  
Catalog Number: 8425  
Gokhan S. Hotamisligil (Public Health) 2725

*BPH 322. Study of Epidemiologic and Biological Characteristics of HIV Viruses in Africa  
Catalog Number: 4523  
Phyllis J. Kanki (Public Health) 2270

*BPH 323. Human Lipoprotein Metabolism: Biochemistry and Metabolic Modeling  
Catalog Number: 5530  
Frank M. Sacks (Medical School) 2276

*BPH 325. Assessment of the Impact of Workplace Pollutants on Health  
Catalog Number: 7448  
David Christiani (Public Health, Medical School) 1514

*BPH 334. Molecular Basis of Host Cell Invasion, Signaling and Differentiation by the Human Pathogen, Trypanosoma Cruzi  
Catalog Number: 2409  
Barbara Burleigh (Public Health) 2763

*BPH 336. Study of Human and Primate T-lymphotrophic Retroviruses Including Agents that Cause AIDS  
Catalog Number: 3248  
Myron Essex (Public Health) 2499

*BPH 339. Mechanical Basis of Airway and Lung Parenchymal Function  
Catalog Number: 6572  
Jeffrey J. Fredberg (Public Health) 1303

*BPH 345. Lung Macrophage Differentiation and Function  
Catalog Number: 1495  
Lester Kobzik (Medical School, Public Health) 1313
*BPH 348. Human and Related Primate Retroviruses
Catalog Number: 3024
Tun-hou Lee (Public Health) 2769

*BPH 352. Regulation of Acute Inflammatory Responses by Signaling Molecules
Catalog Number: 5578
Joseph P. Mizgerd (Public Health) 2787

*BPH 353. Human Papillomaviruses (HPV’s): the Cause of Hyperplastic Skin-lesions
Catalog Number: 6469
Karl Münger (Medical School) 1586

*BPH 357. Physiological and Pharmacological Aspects of Bronchoconstriction.
Catalog Number: 5047
Stephanie A. Shore (Public Health) 1304

*BPH 358. Human Immunodeficiency Virus Envelope Glycoproteins and Vaccine Development
Catalog Number: 0241
Joseph G. Sodroski (Medical School, Public Health) 1712

*BPH 365. Virulence Factors of Mycobacteria; Acquisition of Virulence Determinants of *Vibrio Cholerae*; Generalized Mutagenesis Systems for Bacteria
Catalog Number: 5044
Eric J. Rubin (Public Health) 4084

*BPH 366. Theoretical, Statistical, and Experimental Approaches to Population Biology and the Epidemiology of Infectious Diseases
Catalog Number: 7822
Marc Lipsitch (Public Health) 4097

*BPH 368. Host-pathogen Interactions of *Shigella*
Catalog Number: 6995
Marcia Goldberg (Medical School) 3783

*BPH 372. Molecular Mechanisms Underlying the Pathogenesis of Human Malaria
Catalog Number: 2598
Manoj T. Duraisingh (Public Health) 5177

*BPH 374. Nuclear Lipid Receptors as Therapeutic Targets of Metabolic Diseases
Catalog Number: 3153
Chih-Hao Lee (Public Health) 5294

*BPH 375. Signaling Pathways Underlying Tumorigenesis and Metabolic Diseases
Catalog Number: 3159
Brendan D. Manning (Public Health) 5293
*BPH 376. Secretion and pathogenesis in M. tuberculosis
Catalog Number: 7620
Sarah Merritt Fortune (Public Health) 5736

*BPH 377. Host-Pathogen Interactions in Malaria Parasites
Catalog Number: 98913
Matthias Marti (Public Health) 6439

*BPH 379. Transcriptional Mechanisms that Regulate Inflammatory Gene Expression
Catalog Number: 21747
Tiffany Horng 6612

*BPH 380. Interplay Between the Innate Immune System/Intestinal Microbial Communities
Catalog Number: 73269
Wendy S. Garrett (Public Health) 6613

*BPH 381. Receptor Signaling and Disease
Catalog Number: 41678
Quan Lu 6774

*BPH 382. Aging, Stress Resistance and Dietary Restriction
Catalog Number: 48113
James Mitchell (Public Health) 6907

*BPH 383. Gene regulation and environmental epigenetics - (New Course)
Catalog Number: 85351
Bernardo Lemos Silva (Public Health) 3606

*BPH 384. Sex and reproduction in the mosquito Anopheles gambiae: targets for the control of malaria transmission - (New Course)
Catalog Number: 43307
Flaminia Catteruccia (Public Health) 3493

*BPH 385. The Molecular Genetics of Aging - (New Course)
Catalog Number: 36534
William Mair (Public Health) 3550

*BPH 386. Kidney Disease: From Translational Biomarkers to Molecular Mechanisms & Regenerative Medicine - (New Course)
Catalog Number: 19866
Vishal S. Vaidya (Medical School) 6964

*BPH 387. The tumor suppressor p53-mediated stress response in human cancer - (New Course)
Quarter Courses for Graduate Students Only

*BPH 301qc. Molecular Basis for Nutritional & Metabolic Diseases
Catalog Number: 29149
Chih-Hao Lee (Public Health) and Gokhan S. Hotamisligil (Public Health)
Students have an opportunity to review and analyze key papers that provide physiological and molecular evidence that bears on a topic of current interest in human nutrition and related disorders. Additionally, students learn skills necessary for critical thinking, and oral and written presentations.
Note: Offered jointly with the School of Public Health as ID 512.

*BPH 302qc. Interdisciplinary Training in Pulmonary Sciences Part II
Catalog Number: 95778
Quan Lu 6774 and Lester Kobzik (Public Health) 1313
The intersection of environment and health is by necessity an interdisciplinary focus. The most promising advances in lung biology and respiratory disease are resulting from teams of scientists with diverse disciplinary training, including biology, medicine, engineering, and physics. In addition to a strong foundation in a specific discipline, the ability to recognize and act upon opportunities presented by outside disciplines is a crucial skill. This course is designed to train scientists to approach lung biology and respiratory diseases with an interdisciplinary perspective, in particular by bridging the gap between life sciences and physical/engineering sciences. With a focus on laboratory sciences and on mechanistic levels of understanding, course materials will cover 3 main problem areas: asthma, air pollution, and lung infection. The course consists of weekly course-meetings (lectures and case-studies) plus weekly research seminars from the physiology program. Students will gain skills in recognizing the relative strengths and weaknesses of different disciplinary approaches applied to pulmonary sciences, in designing interdisciplinary experiments effectively, and in interpreting interdisciplinary results critically.
Note: Offered jointly with the School of Public Health as EH 513.

*BPH 303qc. Critical Reading in Pathophysiology of Human Diseases
Catalog Number: 44256
Lester Kobzik (Public Health) 1313
Quarter course (spring term). Tu., 3:30–5.
The objectives of this course are to enhance and supplement knowledge of pathophysiology learned in the main course. This course will use critical reading to explore primary literature, and is especially intended for graduate students in the biological sciences. The course materials and
discussions will provide a deeper understanding of the application and translation of basic
pathophysiology, as found in current biomedical research.
Note: Offered jointly with the School of Public Health as EH 526.

*BPH 304qc. Ecological and Epidemiological Control of Parasitic Diseases
Catalog Number: 59363
Matthias Marti (Public Health) 6439 and Dyann F. Wirth (Public Health) 2492
Provides an introduction to ecological and epidemiological concepts basic to the control of
infectious agents. Considers important parasitic diseases of particular significance in the
developing areas of the world. Epidemiological principles of vector-associated diseases are
elucidated through study of entities such as malaria and schistosomiasis.
Note: Offered jointly with School of Public Health as IID 201.
Prerequisite: Background in biology required; knowledge of pathogenesis of infectious diseases
desirable.

*BPH 305qc. Interdisciplinary Training in Pulmonary Sciences Part 1
Catalog Number: 22948
Quan Lu 6774 and Lester Kobzik (Public Health) 1313
The intersection of environment and health is by necessity an interdisciplinary focus. The most
promising advances in lung biology and respiratory disease are resulting from teams of scientists
with diverse disciplinary training, including biology, medicine, engineering, and physics. In
addition to a strong foundation in a specific discipline, the ability to recognize and act upon
opportunities presented by outside disciplines is a crucial skill. This course is designed to train
scientists to approach lung biology and respiratory diseases with an interdisciplinary perspective,
in particular by bridging the gap between life sciences and physical/engineering sciences. With a
focus on laboratory sciences and on mechanistic levels of understanding, course materials will
cover 3 main problem areas: asthma, air pollution, and lung infection. The course consists of
weekly course-meetings (lectures and case-studies) plus weekly research seminars from the
physiology program. Students will gain skills in recognizing the relative strengths and
weaknesses of different disciplinary approaches applied to pulmonary sciences, in designing
interdisciplinary experiments effectively, and in interpreting interdisciplinary results critically.
Note: Offered jointly with School of Public Health as EH 512.

*BPH 306qc. Tuberculosis
Catalog Number: 89577
Sarah Merritt Fortune (Public Health), Edward Anthony Nardell, and Eric J. Rubin (Medical
School)
This is a comprehensive survey course on tuberculosis featuring lectures by some of the leading
authorities in the field. The first half of the course focuses on population issues (TB
epidemiology in the US and the world), transmission, modeling, and programmatic issues (the
essentials of good TB control both here and in high burden countries). The second month deals
more with the biomedical aspects of TB, immunology, genetics, diagnosis, decision analysis, and
treatment, again, both here and abroad. There is a field trip to the Massachusetts State
Laboratory. Because of involvement of several of the faculty, special attention is paid to the global problem of multidrug resistant TB, and the work of Partners in Health, an NGO associated with the medical school. During the second month, medical students join the SPH students for an elective course involving patient interviews at the state TB hospital. They present these cases and related topics in class during the second month. SPH students are evaluated on the basis of class participation and one or more presentations on relevant TB topics of interest. The course ends on or near World TB Day, with optional TB-related activities in the Boston area.

Note: Offered jointly with School of Public Health as IID 202.

*BPH 308qc. Molecular Signals to Understand Exposure Biology
Catalog Number: 25653
Instructor to be determined
Quarter course (spring term). Fall: Th., 10:30-12:20; Spring: Hours to be arranged.
This course will offer students a deeper understanding of molecular signals often termed, as "Biomarkers" that serve as highly useful tools for understanding the biology of the disease as well as nature and extent of human exposure from environmental contaminants and drugs. The course is divided in 4 modules: 1) Biomarker discovery, 2) Organ/Disease specific biomarkers, 3) Multiscale technologies for biomarker quantitation, and 4) Clinical and statistical considerations in biomarker research.

Note: Offered jointly with School of Public Health as EH 527.

*BPH 309qc. Tumor Cell Signaling and Metabolism
Catalog Number: 63523 Enrollment: Limited to 15.
Brendan D. Manning (Public Health) 5293
This course will focus on the metabolic reprogramming of cells as they undergo the transformation from normal to cancer cells. Emphasis will be placed on the unique nutrient and energy demands of growing tumors, the molecular mechanisms by which oncogenic signaling pathways alter cellular metabolism, and therapeutic opportunities arising from the profound differences in the metabolism of normal versus tumor cells. This course consists of one lecture and one session of critical reading of current primary literature related to the lecture each week.

Note: This course will be taught every other year (odd years).
Prerequisite: Preference given to PhD students in HILS-affiliated programs (e.g., BPH, BBS, etc.)

*BPH 310qc. Molecular Mechanisms of Aging
Catalog Number: 61482
James Mitchell (Public Health) 6907
Quarter course (fall term).
We will explore molecular mechanisms underlying aging and aging-related disease. Topics will include nutrient signaling and energy metabolism, genome stability and proteostasis, interventional approaches to extended longevity, and theories of aging including the free radical theory. Recent and classic literature will be critically discussed.

Note: Offered jointly with HSPH. This course will be taught every other year (odd years).
Biomedical Engineering

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the School of Engineering and Applied Sciences Offering Instruction in Biomedical Engineering

Joanna Aizenberg, Amy Smith Berylson Professor of Materials Science
Sujata K. Bhatia, Lecturer on Biomedical Engineering
David A. Edwards, Gordon McKay Professor of the Practice of Biomedical Engineering (on leave fall term)
Robert D. Howe, Abbott and James Lawrence Professor of Engineering, Area Dean for Bioengineering
Donald E. Ingber, Professor of Bioengineering
Neel S. Joshi, Assistant Professor of Chemical and Biological Engineering
David J. Mooney, Robert P. Pinkas Family Professor of Bioengineering
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Kevin K. Parker, Tarr Family Professor of Bioengineering and Applied Physics (on leave fall term)
Maurice A. Smith, Associate Professor of Bioengineering
Conor J. Walsh, Assistant Professor of Mechanical and Biomedical Engineering

Other Faculty Offering Instruction in Biomedical Engineering

Daniel M. Merfeld, Associate Professor of Otology and Laryngology (Medical School)

Primarily for Undergraduates

*Biomedical Engineering 91r. Supervised Reading and Research - (New Course)*
Catalog Number: 63962
Sujata K. Bhatia
Half course (fall term; repeated spring term). Hours to be arranged.
Guided reading and research.
Note: Normally open to candidates accepted for work on a specific topic by a member of the teaching staff of the School of Engineering and Applied Sciences. Normally may not be taken for more than two terms; may be counted for concentration in Biomedical Engineering if taken for graded credit. Applicants should file a project sheet before study cards are filed. Project sheets may be obtained from the Student Affairs Office, Pierce Hall 110.
Cross-listed Courses

**Engineering Sciences 53. Quantitative Physiology as a Basis for Bioengineering**

*For Undergraduates and Graduates*

**Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis**

Catalog Number: 8197

Daniel M. Merfeld (Medical School)

Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16

A survey of systems theory with applications from bioengineering and physiology. Analysis: differential equations, linear and nonlinear systems, stability, the complementary nature of time and frequency domain methods, feedback, and biological oscillations. Applications: nerve function, muscle dynamics, cardiovascular regulation. Laboratory: neural models, feedback control systems, properties of muscle, cardiovascular function.

*Prerequisite:* Applied Mathematics 21b or Mathematics 21b or equivalent. Physiology at the level of Engineering Sciences 53 suggested.

**Biomedical Engineering 121 (formerly *Engineering Sciences 122). Cellular Engineering**

Catalog Number: 8439

Neel S. Joshi

Half course (fall term). M., W., 10–12, and laboratory to be arranged. EXAM GROUP: 3, 4

Summary of the physical laws governing cellular homeostasis; role of the tissue microenvironment on cell life, death, and differentiation; control of cellular function and genetic programs by adhesion to substrates; signal transduction pathways and cellular metabolic control; mechanochemical and mechanoelectrical signal transduction; cell motility; clinical and industrial applications of engineered cells. The course will contain a laboratory section that will introduce students to basic cell culture techniques, micropatterning of extracellular matrix, and microfluidics. Students are expected to participate in all lecture and laboratory exercises. Assignments will include a presentation on a cellular engineering topic of their choosing, subject to instructor approval, with handouts, homework, and examination questions.

*Prerequisite:* Organic chemistry, cell biology, physics at the level of 11a.b. Suggested courses include molecular biology.

**Biomedical Engineering 125 (formerly Engineering Sciences 130). Tissue Engineering**

Catalog Number: 3169

David J. Mooney

Half course (spring term). Tu., Th., 1-2:30, and a weekly lab. EXAM GROUP: 15, 16

Fundamental engineering and biological principles underlying field of tissue engineering, along with examples and strategies to engineer specific tissues for clinical use. Students will prepare a paper in the field of tissue engineering, and participate in a weekly laboratory in which they will learn and use methods to fabricate materials and perform 3-D cell culture.

*Prerequisite:* Biochemistry or cell biology background.
Biomedical Engineering 130 (formerly Engineering Sciences 149), Neural Control of Movement
Catalog Number: 0440
Maurice A. Smith
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Approaches from robotics, control theory, and neuroscience for understanding biological motor systems. Analytical and computational modeling of muscles, reflex arcs, and neural systems that contribute to motor control in the brain. Focus on understanding how the central nervous system plans and controls voluntary movement of the eyes and limbs. Learning and memory; effects of variability and noise on optimal motor planning and control in biological systems.
Note: Offered in alternate years.
Prerequisite: Mathematics 21b or Applied Mathematics 21b or equivalent, probability and statistics, Physics 11a or equivalent.

Primarily for Graduates

Cross-listed Courses

*Engineering Sciences 227, Medical Device Design

Biophysics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in Biophysics

James M. Hogle, Edward S. Harkness Professor of Biological Chemistry and Molecular Pharmacology (Medical School) (Chair)
Howard C. Berg, Herchel Smith Professor of Physics and Professor of Molecular and Cellular Biology (on leave fall term)
Stephen C. Blacklow, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
George M. Church, Professor of Genetics (Medical School)
Stephen C. Harrison, Giovanni Armenise - Harvard Professor of Basic Biomedical Science (Medical School)
David R. Liu, Professor of Chemistry and Chemical Biology, Harvard College Professor
Venkatesh N. Murthy, Professor of Molecular and Cellular Biology (on leave fall term)
Aravinthan D. T. Samuel, Professor of Physics
Eugene I. Shakhnovich, Professor of Chemistry and Chemical Biology
Gerhard Wagner, Elkan Blout Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

*Other Faculty Offering Instruction in Biophysics*

John A. Assad, Professor of Neurobiology (Medical School)
Frederick Ausubel, Professor of Genetics (Medical School)
Brian Bacsikai, Associate Professor of Neurology (Medical School)
William H. Bossert, David B. Arnold, Jr. Professor of Science
Martha L. Bulyk, Associate Professor of Pathology (Medical School)
Lewis C. Cantley, Professor of Systems Biology (Medical School)
James J. Chou, Associate Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
David E. Clapham, Aldo R. Castaneda Professor of Cardiovascular Research (Medical School)
Jon Claridy, Hsien Wu and Daisy Yen Wu Professor of Biological Chemistry and Molecular Pharmacology, Affiliate of the Department of Chemistry and Chemical Biology (Medical School)
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Jonathan B. Cohen, Professor of Neurobiology (Medical School)
David P. Corey, Professor of Neurobiology (Medical School)
Vladimir Denic, Associate Professor of Molecular and Cellular Biology
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of Physics
John E. Dowling, Gordon and Llura Gund Professor of Neurosciences (on leave spring term)
Jacques Dumais
Michael J. Eck, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Florian Engert, Professor of Molecular and Cellular Biology
Raymond L. Erikson, American Cancer Society Professor of Cellular and Developmental Biology
Conor L. Evans, Assistant Professor of Dermatology (Medical School)
Rachelle Gaudet, Professor of Molecular and Cellular Biology
Suzanne Gaudet, Assistant Professor of Genetics (Medical School)
David E. Golan, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Jene A. Golovchenko, Rumford Professor of Physics and Gordon McKay Professor of Applied Physics (on leave spring term)
J. Woodland Hastings, Paul C. Mangelsdorf Professor of Natural Sciences, Emeritus
Sun Hur, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Donald E. Ingber, Professor of Bioengineering
David Jeruzalmi
Tomas Kirchhausen, Professor of Cell Biology (Medical School)
Andrew J. M. Kiruluta, Associate Professor of Radiology (Medical School)
Roy Kishony, Associate Professor of Systems Biology (Medical School)
Nancy Kleckner, Herchel Smith Professor of Molecular Biology
Isaac S. Kohane, Lawrence J. Henderson Professor of Pediatrics (Medical School)
Roberto G. Kolter, Professor of Microbiology and Molecular Genetics (Medical School)
Gabriel Kreiman, Assistant Professor of Neurology (Medical School)
Galit Lahav, Assistant Professor of Systems Biology (Medical School)
Andres Leschziner, Associate Professor of Molecular and Cellular Biology
Erel Levine, Assistant Professor of Physics
Jun S. Liu, Professor of Statistics (on leave fall term)
Joseph John Loparo, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
Jarrod Marto, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Markus Meister, Visiting Professor of Molecular and Cellular Biology
Keith W. Miller, Mallinckrodt Professor of Pharmacology in the Department of Anaesthesia (Medical School)
Leonid Mirny, Member of the Faculty of the Harvard-MIT Division of Health Sciences and Technology (Medical School)
Timothy J. Mitchison, Hasib Sabbagh Professor of Systems Biology (Medical School)
Andrew W. Murray, Herchel Smith Professor of Molecular Genetics
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of Applied Physics and of Molecular and Cellular Biology
Erin K. O’Shea, Paul C. Mangelsdorf Professor of Molecular and Cellular Biology and of Chemistry and Chemical Biology
Bence P. Olveczky, John L. Loeb Associate Professor of the Natural Sciences
David Pellman, Professor of Cell Biology (Medical School)
Mara Prentiss, Mallinckrodt Professor of Physics (on leave spring term)
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Tom Rapoport, Professor of Cell Biology (Medical School)
Samara Louise Reck-Peterson, Assistant Professor of Cell Biology (Medical School)
Gary B. Ruvkun, Professor of Genetics (Medical School)
Bernardo L. Sabatini, Professor of Neurobiology (Medical School)
Stuart L. Schreiber, Morris Loeb Professor of Chemistry
Brian Seed, Professor of Genetics (Medical School)
Jagesh V. Shah, Assistant Professor of Systems Biology (Medical School)
William Shih, Associate Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Steven E. Shoelson, Professor of Medicine (Medical School)
Pamela A. Silver, Elliott T. and Onie H. Adams Professor of Biochemistry and Systems Biology (Medical School)
Timothy A. Springer, Latham Family Professor of Pathology (Medical School)
Hanno Steen, Assistant Professor of Pathology (Medical School)
Collin Melveton Stultz, Member of the Faculty of Health Sciences and Technology (Medical School)
Biophysics students should consult course listings from the departments of Life Sciences, Chemistry and Chemical Biology, Physics, Molecular and Cellular Biology, the School of Engineering and Applied Sciences (Applied Computation, Applied Mathematics, Applied Physics, Biomedical Engineering, Computer Sciences, and Engineering Sciences), Systems Biology, and the Division of Medical Sciences.

For Undergraduates and Graduates

[Biophysics 101 (Genomics and Computational Biology). Computational Biology]
Catalog Number: 6896
George M. Church (Medical School)
Half course (fall term). Hours to be arranged.
Integrating knowledge, research tools in new aspects of bioengineering, personalized medicine, genetically modified organisms, etc. Interplays of biophysical, ecological, economic, social/ethical modeling are explored through multi-disciplinary teams of students, and individual brief reports.
Note: Expected to be given in 2013–14. Section times will be determined at first class. Offered in alternate years.

Biophysics 170. Quantitative Genomics
Catalog Number: 3598
Shamil R. Sunyaev (Medical School), Isaac S. Kohane (Medical School), Leonid Mirny (Medical School), and members of the Committee
Half course (fall term). M., W., F., 2:30–4. EXAM GROUP: 7, 8
In-depth study of genomics: models of evolution and population genetics; comparative genomics: analysis and comparison; structural genomics: protein structure, evolution and interactions; functional genomics, gene expression, structure and dynamics of regulatory networks.
Note: Meets at MIT
Cross-listed Courses

**Applied Mathematics 104 (formerly Applied Mathematics 105a). Series Expansions and Complex Analysis**

**Applied Mathematics 105 (formerly Applied Mathematics 105b). Ordinary and Partial Differential Equations**

**Applied Mathematics 115. Mathematical Modeling**

**Applied Mathematics 147. Nonlinear Dynamical Systems**

**Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis**

**Chemistry 160. Quantum Chemistry**

**Chemistry 161. Statistical Thermodynamics**

**Chemistry 163. Frontiers in Biophysics**

*Chemistry 165. Experimental Physical Chemistry*

*Chemistry 170 (formerly *Chemistry 270). Chemical Biology*

**Chemistry 190. Statistical Mechanics in Chemistry and Biology**

**Engineering Sciences 156. Signals and Systems**

**Mathematics 115. Methods of Analysis**

**MCB 105. Systems Neuroscience**

**MCB 111. Mathematics in Biology**

**MCB 115. Cellular Basis of Neuronal Function**

*MCB 129. The Brain: Development, Plasticity and Decline*

**MCB 169. Molecular and Cellular Immunology**

**MCB 176. Biochemistry of Membranes**

**SCRB 150 (formerly MCB 150). Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease**

**Primarily for Graduates**

**Biophysics 204. Structural Biology From Molecules to Cells**

Catalog Number: 1728

*Stephen C. Harrison (Medical School)*

*Half course (spring term). Hours to be arranged.*

Imaging of molecules and of molecular localization in cells, including x-ray and electron crystallography, electron microscopy of single molecules, and high-resolution light microscopy. Lectures and student presentations of selected papers from the literature.

*Note:* Expected to be given in 2013–14.

**Biophysics 205. Computational and Functional Genomics**

Catalog Number: 6777 Enrollment: Limited to 20.

*Martha L. Bulyk (Medical School), Suzanne Gaudet (Medical School), and Shamil R. Sunyaev (Medical School)*

*Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8*

Experimental functional genomics, computational prediction of gene function, and properties and models of complex biological systems. The course will primarily involve critical reading and discussion rather than lectures.
Prerequisite: Molecular Biology (MCB 52 or equivalent), solid understanding of basic probability and statistics.

Biophysics 242r. Special Topics in Biophysics
Catalog Number: 6011
James M. Hogle (Medical School) and Aravinthan D. T. Samuel
Biophysical topics emerging from special interest research not normally available in established curriculum. Year’s focus: Brain, behavior, and biophysics, how biophysics has aided understanding of brain and behavior from E. coli to H. sapiens.
Note: Weekly lectures with discussion sections.

Cross-listed Courses

Applied Mathematics 201. Physical Mathematics I
Applied Mathematics 202. Physical Mathematics II
BCMP 200. Molecular Biology
BCMP 201. Biological Macromolecules: Structure, Function and Pathways
BCMP 228. Macromolecular NMR
Cell Biology 201. Molecular Biology of the Cell
[Chemical Biology 207. Molecular Approaches to Drug Action, Discovery, and Design]
*Chemistry 242. Quantum Mechanics for Physical Chemistry
Genetics 201. Principles of Genetics
MCB 212. Topics in Biophysics
Microbiology 201. Molecular Biology of the Bacterial Cell
*Microbiology 205. Mechanisms of Microbial Pathogenesis
Neurobiology 200. Neurobiology
Neurobiology 204. Neurophysiology of Central Circuits
Neurobiology 221. Molecular Neurobiology
OEB 242. Population Genetics
Systems Biology 200. Dynamic and Stochastic Processes in Cells
Systems Biology 204. Biomolecular Engineering and Synthetic Biology
[Systems Biology 205. Synthetic Biology]

Graduate Courses of Reading and Research

*Biophysics 300. Introduction to Laboratory Research
Catalog Number: 7509
James M. Hogle (Medical School) 2943 and members of the Committee
Half course (fall term; repeated spring term). M., W., F., at 4:30. EXAM GROUP: Fall: 9
Introductory lectures by associated Biophysics faculty members. Lectures Fall semester only accompanied by three periods of instruction in laboratories of structural biology, cell and membrane biophysics, molecular genetics and development, neurobiology, bioinformatics, and physical biochemistry.
Note: Fall semester only: meets on both the Cambridge and HMS campuses. Contact department Admin for fall course schedule.
*Biophysics 301. Quantitative Proteomics of Cancer Progression  
Catalog Number: 1302  
*Jarrod Marto (Medical School) 5326

*Biophysics 302. Quantitative Analysis of Regulatory Networks  
Catalog Number: 4405  
*Erin K. O'Shea 5239

*Biophysics 303. NMR Studies of Macromolecular Structure and Function  
Catalog Number: 6135  
*Gerhard Wagner (Medical School) 2626

*Biophysics 304. Basic Mechanisms of T cell Mediated Autoimmune Diseases  
Catalog Number: 5921  
*Kai Wucherpfennig (Medical School) 2481

*Biophysics 305. Experimental Atomic Physics, Biophysics, and Soft Matter Physics  
Catalog Number: 8626  
*Ronald L. Walsworth 2263

*Biophysics 306. Quantitative Models of Cellular Behavior to Investigate Protein Function  
Catalog Number: 4339  
*Jagesh V. Shah (Medical School) 5248

*Biophysics 307. Dynamics of Network Motifs in Single Living Human Cells  
Catalog Number: 9749  
*Galit Lahav (Medical School) 5247

*Biophysics 308. System-level Genetic Networks  
Catalog Number: 1036  
*Roy Kishony (Medical School) 5501

*Biophysics 309. Motile Behavior of Bacteria  
Catalog Number: 2070  
*Howard C. Berg 1377 (on leave fall term)

*Biophysics 310. Sensory Information in Neuronal Processes  
Catalog Number: 6651  
*Naoshige Uchida 5745

*Biophysics 311. Digital Computer Applications in Biophysics  
Catalog Number: 7606  
*William H. Bossert 1049
*Biophysics 312. Multiphoton Microscopy in Imaging Alzheimer’s Disease
Catalog Number: 5860
*James M. Hogle (Medical School) 2943 and Brian Bacskaí (Medical School) 6693*

*Biophysics 313. Neurobiology of Vocal Learning
Catalog Number: 9094
*Bence P. Olveczky 6003*

*Biophysics 314. Structure of Viruses and Viral Proteins
Catalog Number: 0687
*James M. Hogle (Medical School) 2943*

*Biophysics 315. Structural Molecular Biology
Catalog Number: 2805
*Stephen C. Harrison (Medical School) 3597*

*Biophysics 316. Structural Biology of ATP-Dependent Chromatin Remodeling
Catalog Number: 4680
*Andres Leschziner 5928*

*Biophysics 317. Biophysical Aspects of the Visual System
Catalog Number: 4770
*John E. Dowling 3545 (on leave spring term)*

*Biophysics 318. Mechanisms of Circadian Rhythms, Bioluminescence
Catalog Number: 4699
*J. Woodland Hastings 1311*

*Biophysics 319. Analysis of Structure and Function of Nicotinic Acetylcholine Receptors
Catalog Number: 36825
*Adam E. Cohen 5761*

*Biophysics 320. Single Molecule Studies of Cellular Motors
Catalog Number: 51932
*Samara Louise Reck-Peterson (Medical School) 6165*

*Biophysics 321. Molecular and Mechanical Analysis of Chromosomes
Catalog Number: 7297
*Nancy Kleckner 4697*

*Biophysics 322. Structural Diversification of Very Long-Chain Fatty Acids
Catalog Number: 67039
*Vladimir Denic 6216*

*Biophysics 323. Transcriptional Regulatory Circuits and Neuronal Circuits in Visual Recognition
2012-2013 Previous Courses of Instruction

Catalog Number: 42674  
*Biophysics 324. Conformational Changes in Macromolecules  
Catalog Number: 2656  
Collin Melveton Stultz (Medical School) 6295

Catalog Number: 15517  
*Biophysics 325. Physics of Macromolecular Assemblies and Subcellular Organization  
Daniel Joseph Needleman 6151

Catalog Number: 82146  
*Biophysics 326. Statistical and Continuum Mechanics of Macromolecular Assemblies  
L. Mahadevan 4758

Catalog Number: 4202  
*Biophysics 327. Molecular Genetics  
Frederick Ausubel (Medical School) 4639

Catalog Number: 92917  
*Biophysics 328. Mechanics and Morphogenesis of Plant Development  
Jacques Dumais 4719

Catalog Number: 4437  
*Biophysics 329. Computational and Functional Genomics  
George M. Church (Medical School) 1608

Catalog Number: 41395  
Sun Hur (Medical School) 6403

Catalog Number: 56502  
*Biophysics 331. Communication of Information In and Between Cells and Organisms  
Erel Levine 6304

Catalog Number: 5444  
*Biophysics 332. Function of Neuronal Circuits  
Markus Meister 3007

Catalog Number: 0196  
*Biophysics 333. Topics in Biophysics and Molecular Biology  
Brian Seed (Medical School) 7619

Catalog Number: 71609  
*Biophysics 334. Decision Making in Cells and Organisms  
Sharad Ramanathan 6015
*Biophysics 335. Developing novel single-molecule methods to study multi-protein complexes
Catalog Number: 72097
Joseph John Loparo (Medical School) 6798

*Biophysics 336. Mass Spectrometric and Proteomic Studies of the Cell Cycle
Catalog Number: 20087
Hanno Steen (Medical School) 6572

*Biophysics 337. Membrane Structure and Function
Catalog Number: 1800
Keith W. Miller (Medical School) 4124

*Biophysics 338. Foundation of Information Directed Molecular Technology: Programming Nucleic Acid Self-Assembly
Catalog Number: 20575
Peng Yin (Medical School) 6848

*Biophysics 339. Theoretical and Experimental Approaches to Study Genetic Variation within Populations
Catalog Number: 87204
Michael Manish Desai 6547

*Biophysics 340. Novel Theory and Experiments in NMR Spectroscopy
Catalog Number: 35682
Andrew J. M. Kiruluta (Medical School) 4777

*Biophysics 341. Structure and Function of Ligand-Gated Ion Channels
Catalog Number: 7567
Jonathan B. Cohen (Medical School) 1120

*Biophysics 342. Development and Application of Optical Detection, Treatment and Monitoring Approaches Targeting Major Human Diseases
Catalog Number: 50789
Conor L. Evans (Medical School) 6802

*Biophysics 343. Theoretical Protein Science, Bioinformatics, Computational Chemistry
Catalog Number: 6947
Eugene I. Shakhnovich 3147

*Biophysics 344. Directed Evolution and Design of Simple Cellular Systems
Catalog Number: 6277
Jack Szostak (Medical School) 7096
*Biophysics 346. Biofilm Dynamics  
Catalog Number: 5538  
Roberto G. Kolter (Medical School) 7727

*Biophysics 347. Membrane Dynamics; Membrane Structure  
Catalog Number: 5516  
David E. Golan (Medical School) 1558

*Biophysics 348. Protein Kinases, Reversible Protein Phosphorylation  
Catalog Number: 4964  
Raymond L. Erikson 7506

*Biophysics 349. Structural Biochemistry and Cell Biology of Intracellular Membrane Traffic  
Catalog Number: 4487  
Tomas Kirchhausen (Medical School) 1155

*Biophysics 351. Signal Transduction  
Catalog Number: 3848  
Lewis C. Cantley (Medical School) 1287

*Biophysics 353. Molecular Genetics of Development  
Catalog Number: 5016  
Gary B. Ruvkun (Medical School) 1366

*Biophysics 354. Structural Biology and Cancer Drug Discovery  
Catalog Number: 4420  
Gregory L. Verdine 1980

*Biophysics 355. Chemical Genetics and Genomics  
Catalog Number: 3035  
Stuart L. Schreiber 2166

*Biophysics 361. Rational Drug Design; Biomaterials Science; Biophysics  
Catalog Number: 7080  
George M. Whitesides 7447

*Biophysics 362. Molecular Physiology of Ion Channels  
Catalog Number: 3784  
Gary I. Yellen (Medical School) 3268

*Biophysics 363. Biophysics of Receptor-Ligand Interactions  
Catalog Number: 8687  
Stephen C. Blacklow (Medical School) 1462
*Biophysics 364. Systems Cell Biology  
Catalog Number: 5528  
Pamela A. Silver (Medical School) 1595

*Biophysics 365. Visual Processing in Primates  
Catalog Number: 8145  
John A. Assad (Medical School) 2985

*Biophysics 366. Imaging, Optics, and Biology  
Catalog Number: 2877  
David E. Clapham (Medical School) 2987

*Biophysics 367. Structure Biology of Cytoplasmic Signal Transduction  
Catalog Number: 5512  
Michael J. Eck (Medical School) 1739

*Biophysics 368. Probing Polymers with Nanospores, Experimental Condensed Matter Physics  
Catalog Number: 1400  
Jene A. Golovchenko 1986 (on leave spring term)

*Biophysics 369. Organic Chemistry and Chemical Biology of Molecular Evolution  
Catalog Number: 6337  
David R. Liu 2717

*Biophysics 370. Cytoskeleton Dynamics; Mitosis and Cell Locomotion; Small Molecule Inhibitors  
Catalog Number: 8034  
Timothy J. Mitchison (Medical School) 3713

*Biophysics 371. Mechanisms of Synaptic Transmission and Plasticity  
Catalog Number: 2326  
Venkatesh N. Murthy 2424 (on leave fall term)

*Biophysics 372. Protein Transport Across the ER Membrane  
Catalog Number: 6922  
Tom Rapoport (Medical School) 1815

*Biophysics 374. High-Resolution Electron Microscopy  
Catalog Number: 8225  
Thomas Walz (Medical School) 3778

*Biophysics 375. Single-Molecule Biophysics  
Catalog Number: 7900  
Xiaoliang Sunney Xie 2290
*Biophysics 376. Functional and Computational Genomics Studies of Transcription Factors and Cis Regulatory Elements
Catalog Number: 2254
Martha L. Bulyk (Medical School) 4259

*Biophysics 377. Statistical Theory and Inference for Stochastic Processes: With Applications to Bioinformatics
Catalog Number: 4768
Jun S. Liu 3760 (on leave fall term)

*Biophysics 378. Structural and Cellular Biology of Insulin Signal Transduction
Catalog Number: 4856
Steven E. Shoelson (Medical School) 3951

*Biophysics 379. Theoretical Population Genetics
Catalog Number: 2274
John Wakeley 5680

*Biophysics 380. Microarray Data: Issues and Challenges
Catalog Number: 4402
James M. Hogle (Medical School) 2943 and Leonid Mirny (Medical School) 5773

*Biophysics 381. Single-Molecule Biophysics
Catalog Number: 3046
Xiaowei Zhuang 3991

*Biophysics 382. Regulation of Synaptic Transmission and Dendritic Function in the Mammalian Brain
Catalog Number: 6116
Bernardo L. Sabatini (Medical School) 4300

*Biophysics 384. NMR Spectroscopy on Membrane-associated Proteins and Peptides
Catalog Number: 4531
James J. Chou (Medical School) 4950

*Biophysics 385. Small Molecule Signaling, Biosynthesis, and Drug Discovery
Catalog Number: 8378
Jon Clardy (Medical School) 4667

*Biophysics 386. Synaptic Plasticity and Neuronal Networks
Catalog Number: 3012
Florian Engert 4290

*Biophysics 387. Structural Studies of the Stereochemistry of Signaling and Transport through Biological Membranes
**Biophysics 388. Structural Studies of Nucleo-Protein Assemblies**  
Catalog Number: 1543  
David Jeruzalmi 4528

**Biophysics 390. Regulation of Mitosis**  
Catalog Number: 2157  
Andrew W. Murray 3765

**Biophysics 391. Computational Methods in Genetics, Genomics and Proteomics**  
Catalog Number: 7043  
Shamil R. Sunyaev (Medical School) 4671

**Biophysics 392. Biophysics of Mechanosensation**  
Catalog Number: 2687  
David P. Corey (Medical School) 1345

**Biophysics 393. The Mechanics and Regulation of Mitosis**  
Catalog Number: 6759  
David Pellman (Medical School) 3702

**Biophysics 394. Experimental Biophysics**  
Catalog Number: 7138  
Mara Prentiss 2741 (on leave spring term)

**Biophysics 395. Biophysics of Cell Adhesion and Vascular Shear Flow**  
Catalog Number: 3918  
Timothy A. Springer (Medical School) 6145

**Biophysics 396. Behavioral Neuroscience and Neurophysiology**  
Catalog Number: 0966  
Aravinthan D. T. Samuel 4625

**Biophysics 397. Research in Integrin Signaling, Cytoskeleton, and Control of Angiogenesis**  
Catalog Number: 2982  
Donald E. Ingber 2832

**Biophysics 399. Biomolecular Nanotechnology**  
Catalog Number: 8294  
William Shih (Medical School) 5256
Biostatistics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The 2012-13 membership of this committee has not yet been finalized. Complete membership information for 2012-13 will be posted as soon as it becomes available.

Faculty of the Committee on Higher Degrees in Public Health Sciences

Victor Gerard DeGruttola, Professor of Biostatistics (Public Health) (Chair)

Faculty of the Subcommittee on the Degree of Doctor of Philosophy in Biostatistics

Victor Gerard DeGruttola, Professor of Biostatistics (Public Health) (Chair)
David J. Hunter, Vincent L. Gregory Professor in Cancer Prevention (Public Health) (ex officio)
Xiao-Li Meng, Whipple V.N. Jones Professor of Statistics, Dean of the Graduate School of Arts and Sciences
Carl N. Morris, Professor of Statistics (on leave spring term)
Giovanni Parmigiani, Professor of Biostatistics (Public Health)

Other Faculty Offering Instruction in Biostatistics in Public Health

Christopher David Barr, Assistant Professor of Biostatistics (Public Health)
Rebecca A. Betensky, Professor of Biostatistics (Public Health)
Tianxi Cai, Associate Professor of Biostatistics (Public Health)
Paul J. Catalano, Senior Lecturer on Biostatistics (Public Health)
Brent Andrew Coull, Associate Professor of Biostatistics (Public Health)
Francesca Dominici, Professor of Biostatistics (Public Health)
Dianne Madelyn Finkelstein, Professor in the Department of Biostatistics (Public Health)
Garrett M. Fitzmaurice, Professor in the Department of Biostatistics (Public Health)
Robert James Gray, Professor of Biostatistics (Public Health)
Sebastien Haneuse, Assistant Professor of Biostatistics (Public Health)
David P. Harrington, Professor of Statistics and Professor of Biostatistics (Public Health)
Winston Hide, Associate Professor of Bioinformatics and Computational Biology (Public Health)
Michael David Hughes, Professor of Biostatistics (Public Health)
Curtis Huttenhower, Assistant Professor of Computational Biology and Bioinformatics (Public Health)
Peter Kraft, Associate Professor of Epidemiology (Public Health)
Nan Laird, Professor of Biostatistics (Public Health)
Christoph Lange, Associate Professor of Biostatistics (Public Health)
Cheng Li, Associate Professor of Biostatistics (Public Health)
Yi Li, Associate Professor of Biostatistics (Public Health)
Liming Liang, Assistant Professor of Statistical Genetics (Public Health)
Xihong Lin, Professor of Biostatistics (Public Health)
Jun S. Liu, Professor of Statistics (on leave fall term)
Xiaole Shirley Liu, Associate Professor of Biostatistics (Public Health)
Judith Lok, Assistant Professor of Biostatistics (Public Health)
Franziska L. Michor, Associate Professor of Computational Biology (Public Health)
Donna S. Neuberg, Senior Lecturer on Biostatistics (Public Health)
Sharon-Lise T. Normand, Professor of Health Care Policy (Biostatistics) (Medical School)
Endel J. Orav, Associate Professor in the Department of Biostatistics (Public Health)
Alexander Ozonoff, Lecturer on Pediatrics (Medical School)
Marcello Pagano, Professor of Statistical Computing (Public Health)
John Quackenbush, Professor of Computational Biology and Bioinformatics (Public Health)
James M. Robins, Mitchell L. and Robin LaFoley Dong Professor of Epidemiology (Public Health)
Bernard Rosner, Professor of Medicine (Biostatistics) (Medical School)
Andrea Gloria Rotnitzky, Adjunct Professor of Biostatistics (Public Health)
David A. Schoenfeld, Professor in the Department of Biostatistics (Public Health)
Donna Lynn Spiegelman, Professor of Epidemiologic Methods (Public Health)
Eric Tchetgen Tchetgen, Associate Professor of Epidemiology (Public Health)
Lorenzo Trippa, Assistant Professor of Biostatistics (Public Health)
Tyler J. VanderWeele, Associate Professor of Epidemiology (Public Health)
James H. Ware, Frederick Mosteller Professor of Biostatistics (Public Health)
Lee-Jen Wei, Professor of Biostatistics (Public Health)
Paige L. Williams, Senior Lecturer on Biostatistics (Public Health)
David Wypij, Senior Lecturer on Biostatistics (Public Health)
Guocheng Yuan, Assistant Professor of Computational Biology and Bioinformatics (Public Health)
Marvin Zelen, Lemuel Shattuck Research Professor of Statistical Science (Public Health)

**Primarily for Graduates**

Further details about the course descriptions below can be found in their entirety at www.biostat.harvard.edu/courses/course.html.

*Biostatistics 230. Probability Theory and Applications I*

Catalog Number: 6183

*Christopher David Barr (Public Health)*

Half course (fall term). M., W., 1:30–3:20, and a weekly 90-minute lab. EXAM GROUP: 6, 7, 8

Axiomatic foundations of probability, independence, conditional probability, joint distributions, transformations, moment generating functions, characteristic functions, moment inequalities, sampling distributions, modes of convergence and their interrelationships, laws of large numbers, central limit theorem, and stochastic processes.

*Note:* Offered jointly with the School of Public Health as BIO230.
**Biostatistics 231. Statistical Inference I**  
Catalog Number: 8773  
*Rebecca A. Betensky (Public Health)*  
*Half course (spring term). M., W., 10:30-12:20, and a weekly 90-minute lab.*  
Exponential families, sufficiency, ancillarity, completeness, method of moments, maximum likelihood, unbiased estimation, Rao-Blackwell and Lehmann-Scheffe theorems, information inequality, Neyman-Pearson theory, likelihood ratio, score and Wald tests, uniformly and locally most powerful tests, asymptotic relative efficiency.  
Note: Offered jointly with the School of Public Health as BIO231.  
Prerequisite: Biostatistics 230 or signature of instructor required.

**Biostatistics 232. Methods I**  
Catalog Number: 0131  
*Eric Tchetgen Tchetgen (Public Health)*  
*Half course (fall term). M., W., 10:30-12:20, and a weekly 90-minute lab.*  
Introductory course in the analysis of Gaussian and categorical data. The general linear regression model, ANOVA, robust alternatives based on permutations, model building, resampling methods (bootstrap and jackknife), contingency tables, exact methods, logistic regression.  
Note: Offered jointly with the School of Public Health as BIO232.  
Prerequisite: Signature of instructor required.

**Biostatistics 233. Methods II**  
Catalog Number: 7804  
*Sebastien Haneuse (Public Health)*  
*Half course (spring term). M., W., 8:30-10:20, and a weekly 90-minute lab.*  
Intermediate course in the analysis of Gaussian, categorical, and survival data. The generalized linear model, Poisson regression, random effects and mixed models, comparing survival distributions, proportional hazards regression, splines and smoothing, the generalized additive model.  
Note: Offered jointly with the School of Public Health as BIO233.  
Prerequisite: Biostatistics 232 or signature of instructor required.

**Biostatistics 235. Regression and Analysis of Variance**  
Catalog Number: 7549  
*Robert James Gray (Public Health)*  
*Half course (fall term). M., W., 10:30–12:20, and a weekly 90-minute lab.*  
An advanced course in linear models - regression and analysis of variance. Estimation (maximum likelihood and least squares) and inference (confidence intervals, hypothesis testing, analysis of residuals) are presented from a theoretical and data analysis perspective.  
Note: Offered jointly with the School of Public Health as BIO235.  
Prerequisite: Biostatistics 230 and Biostatistics 232. Background in matrix algebra and linear regression required.

**Biostatistics 238. Principles and Advanced Topics in Clinical Trials**  
Catalog Number: 9623
Michael David Hughes (Public Health)
This course focuses on selected advanced topics in design, analysis, and interpretation of clinical trials, including study design; choice of endpoints (including surrogate endpoints); interim analyses and group sequential methods; subgroup analyses; and meta-analyses.
Note: Offered jointly with the School of Public Health as BIO 238.
Prerequisite: BIST 230, and BIST 231 (may be taken concurrently) or signature of instructor required.

Biostatistics 244. Analysis of Failure Time Data
Catalog Number: 2140
Judith Lok (Public Health)
Discusses the theoretical basis of concepts and methodologies associated with survival data and censoring, nonparametric tests, and competing risk models. Much of the theory is developed using counting processes and martingale methods.
Note: Offered jointly with the School of Public Health as BIO244.
Prerequisite: Biostatistics 231 and Biostatistics 233.

Biostatistics 245. Analysis of Multivariate and Longitudinal Data
Catalog Number: 3247
Xihong Lin (Public Health)
The multivariate normal distribution, Hotelling’s T2, MANOVA, repeated measures, the multivariate linear model, random effects and growth curve models, generalized estimating equations, multivariate categorical outcomes, missing data, computational issues for traditional and new methodologies.
Note: Offered jointly with the School of Public Health as BIO245.
Prerequisite: Biostatistics 231 and Biostatistics 235.

*Biostatistics 249. Bayesian Methodology in Biostatistics
Catalog Number: 0759
Francesca Dominici (Public Health)
General principles of the Bayesian approach, prior distributions, hierarchical models and modeling techniques, approximate inference, Markov chain Monte Carlo methods, model assessment and comparison. Bayesian approaches to GLMMs, multiple testing, nonparametrics, clinical trials, survival analysis.
Note: Offered jointly with the School of Public Health as BIO249. Offered in alternate years.
Prerequisite: Biostatistics 231 and Biostatistics 232, or signature of instructor required.

*Biostatistics 250. Probability Theory and Applications II
Catalog Number: 5076
Lorenzo Trippa (Public Health)
Basic set theory, measure theory, Riemann-Stieltjes and Lebesgue integration, conditional
probability, conditional expectation (projection), martingales, Radon-Nikodym derivative, product measure and Fubini’s Theorem, limit theorems on sequences of random variables, stochastic processes, weak convergence.

*Note:* Offered jointly with the School of Public Health as BIO250.

*Prerequisite:* Biostatistics 230 and Biostatistics 232, or signature of instructor required.

**Biostatistics 251. Statistical Inference II**
Catalog Number: 5280
Tianxi Cai (Public Health)
Advanced topics in statistical inference. Limit theorems, multivariate delta method, properties of maximum likelihood estimators, saddle point approximations, asymptotic relative efficiency, robust and rank-based procedures, resampling methods, nonparametric curve estimation.

*Note:* Offered jointly with the School of Public Health as BIO251.

*Prerequisite:* Biostatistics 231.

**[Biostatistics 257. Advanced Statistical Genetics]**
Catalog Number: 8359
Christoph Lange (Public Health)
This survey course, intended for a wide audience, will provide an introduction to analytic techniques for modern genomics and genetics. Topics include genome sequencing, DNA microarrays, proteomics, genetic epidemiology and gene mapping for complex disease.

*Note:* Expected to be given in 2013–14. Offered jointly with the School of Public Health as BIO 257.

*Prerequisite:* BIO 231 and BIO 233, or permission of instructor required.

**[Biostatistics 291. Statistical Methods for Causality]**
Catalog Number: 5654
Andrea Gloria Rotnitzky (Public Health)

*Note:* Expected to be given in 2013–14. Offered jointly with the School of Public Health as BIO 291.

*Prerequisite:* BIO 231, or permission of instructor required.

**Biostatistics 297. Genomic Data Manipulation**
Catalog Number: 67195
Curtis Huttenhower (Public Health)
Introduction to genomic data, computational methods for interpreting these data, and survey of current functional genomics research. Covers biological data processing, programming for large datasets, high-throughput data (sequencing, proteomics, expression, etc.), and related
publications.  
Note: Offered jointly with the School of Public Health as BIO508.

**Biostatistics 298. Introduction to Computational Biology and Bioinformatics**  
Catalog Number: 15673  
Enrollment: Good quantitative skills, strong interest in biology, willingness and diligence to learn programming.  
*Xiaole Shirley Liu (Public Health)*  
Half course (spring term). Tu., Th., 11:30–1.  
Basic problems, technology platforms, algorithms and data analysis approaches in computational biology. Algorithms covered include dynamic programming, hidden Markov model, Gibbs sampler, clustering and classification methods.  
Note: Offered jointly with the School of Public Health as BIO512.  
Prerequisite: STAT 110 or equivalent, CS 50 or equivalent, or Biostatistics major.

**Biostatistics 299. Advanced Computational Biology and Bioinformatics**  
Catalog Number: 82302  
*Winston Hide (Public Health) and Guocheng Yuan (Public Health)*  
Students will explore current topics in computational biology in a seminar format with a focus on interpretation of ’omics data. They will develop skills necessary for independent research using computational biology.  
Note: Offered jointly with the School of Public Health as BIO513.  
Prerequisite: Biostatistics 298 or permission of instructor required.

**Graduate Courses of Reading and Research**

**Biostatistics 350. Research**  
Catalog Number: 0406  
*Members of the Department*  
For doctoral candidates who have passed their written qualifying examination and who are undertaking advanced work along the lines of fundamental or applied dissertation research in the department.

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**Business Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

PhD programs in Business Economics and Organizational Behavior are administered by the Standing Committee on Higher degrees in Business Studies. These programs are intended for students who wish to enter careers in scholarship and advanced research. For the latest Doctoral
Program course offerings from the Harvard Business School, please visit www.hbs.edu/doctoral/registrar/course.html.

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Luis M. Viceira, George E. Bates Professor (Business School)
Christopher Winship, Diker-Tishman Professor of Sociology (on leave spring term)
Dennis A. Yao, Lawrence E. Fouraker Professor of Business Administration (Business School)

The Standing Committee on Higher Degrees in Business Studies is a joint committee consisting of members from both the Harvard Business School (HBS) and the Faculty of Arts and Sciences (FAS). The Committee, chaired by Professor Kathleen McGinn (Business School), is composed of the following subcommittees:

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Christopher Winship, Diker-Tishman Professor of Sociology (on leave spring term)

Subcommittee on the Degree of Doctor of Philosophy in Science, Technology, and Management

Kathleen Louise McGinn, Cahners-Rabb Professor of Business Administration (Business School) (Chair)

Cross-listed Courses

Applied Mathematics 221. Advanced Optimization
*Economics 2020a. Microeconomic Theory I
*Economics 2020b. Microeconomic Theory II
[Economics 2040. Experimental Economics]
Economics 2041. Field Experiments
Economics 2056a. Market Design and Electronic Marketplaces
[Economics 2056b. Topics in Market Design]
Economics 2390c. Development Economics II: Macroeconomic Issues
[Economics 2665. The Economics of Organizations Workshop]
[Economics 2670. Organizational Economics]
Economics 2723. Asset Pricing I
Economics 2725. Corporate Finance
[Economics 2726. Theoretical and Empirical Perspective on Entrepreneurship: Economics and Finance]
Economics 2727. Empirical Methods in Corporate Finance
*Economics 2770hf. Research in Financial Economics
*Economics 3660hf. The Law, Economics, and Organizations Workshop
*Psychology 2553r. Decision Making and Negotiation: Research Seminar
[*Psychology 2650. Behavioral Approaches to Decision Making and Negotiation]
*Sociology 224. Organizational Analysis: Seminar
Celtic Languages and Literatures

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Celtic Languages and Literatures

Elizabeth FitzPatrick, Visiting Lecturer on Celtic Languages and Literatures
Tomás Ó Cathasaigh, Henry L. Shattuck Professor of Irish Studies (Acting Chair, Director of Graduate Studies-spring term) (on leave fall term)
Simon R. Innes, Assistant Professor of Celtic Languages and Literatures
Catherine McKenna, Margaret Brooks Robinson Professor of Celtic Languages and Literatures (Chair, Director of Graduate Studies-fall term) (on leave spring term)

Other Faculty Offering Instruction in the Department of Celtic Languages and Literatures

Patrick K. Ford, Margaret Brooks Robinson Professor of Celtic Languages and Literatures, Emeritus

Graduate students in the Faculty of Arts and Sciences may enroll in certain foreign language courses for the grade of Satisfactory/Unsatisfactory. Students should consult with course heads to determine if a course is offered on that basis.

Primarily for Undergraduates

*Celtic 91r. Supervised Reading and Research
Catalog Number: 1323
Members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Instruction and direction of reading on topics not treated in regular courses of instruction.

Celtic

For Undergraduates and Graduates

[Celtic 101. The Hero of Irish Myth and Saga]
Catalog Number: 7817
Tomás Ó Cathasaigh
Half course (spring term). M., W., (F.), at 1. EXAM GROUP: 6
A study of the ways in which the hero is represented in early Irish sources, especially in the saga
literature. The texts reflect the ideology and concerns of a society which had been converted to Christianity, but continued to draw on its Indo-European and Celtic heritage. The biographies of the Ulster hero, Cú Chulainn, of his divine father, Lug, and of certain king-heroes are studied in depth. The wisdom literature, and archaeological and historical evidence will be taken into account.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

[Celtic 103. Celts: People or Myth?]
Catalog Number: 51424
Catherine McKenna

Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13
This course examines the ways that an elusive population group called "The Celts" has been constructed from antiquity to the present. We study the linguistic, archaeological, genetic, mythological, literary and institutional bases of "Celticity" in the light of recent critiques of the ways in which these different kinds of evidence have been asked to walk hand in hand with one another in the service of certainty about Celtic identity.

Note: Expected to be given in 2014–15. All texts are read in translation.

[Celtic 106. The Folklore of Gaelic Scotland]
Catalog Number: 85544
Simon R. Innes

Half course (spring term). M., W., (F.), at 2. EXAM GROUP: 7
An introduction to the oral traditions of Gaelic Scotland and Nova Scotia, including tales and song. The process of collecting is explored, and various folkloristic theories and approaches applied in order to gain a deeper understanding of the material.

Note: Expected to be given in 2013–14. No knowledge of Gaelic required. This course is offered as Freshman Seminar 30j in spring term 2013.

[Celtic 109. The Finn Cycle]
Catalog Number: 77175
Simon R. Innes

Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
This course explores the 'sprawling forest’ of Gaelic literature from Ireland and Scotland surrounding Finn mac Cumaill (otherwise known as Finn MacCool). Finn is variously portrayed as a hunter-warrior-seer and is the leader of the intrepid fíana war-band. We survey this Fenian literature as it is presented to us by medieval and early modern Gaelic manuscript tradition. We also engage with the rich modern Fenian folklore of Scotland, Ireland and Nova Scotia. This includes the study of important texts such as Acallam na Senórach ('The Dialogue of the Ancients’) and Tóraigheacht Dhiarmaid agus Ghráinne ('The Pursuit of Diarmait and Gráinne’). We also consider the impact of this literature on the rest of Europe by examining the English-language-works published by James MacPherson in the 1760s and the ensuing Ossian controversy.

Note: Expected to be given in 2015–16. All readings in English translation.
Celtic 114. Early Irish Historical Tales
Catalog Number: 0781
Tomás Ó Cathasaigh
Half course (spring term). M., W., (F.), at 1. EXAM GROUP: 6
Introduction to early Irish story-material about legendary and historical persons and events. Attitudes to kingship and views of history in the tales are explored.
Note: Expected to be omitted in 2013–14. All texts are read in English translation.

Celtic 118. The Gaelic World: 12th Century to 17th Century
Catalog Number: 34022
Simon R. Innes
Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
An introduction to the history and culture of Gaelic Scotland and Ireland, with particular attention to contemporary sources, including Gaelic literary sources.
Note: Expected to be omitted in 2013–14. All readings in English translation.

Celtic 119. The Gaelic World: 17th Century to the Present
Catalog Number: 49129
Simon R. Innes
Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4
An introduction to the later history and culture of Gaelic Scotland and Ireland, with particular attention to Gaelic literary sources. Language decline and revitalization efforts are also explored.
Note: Expected to be omitted in 2013–14. All readings in English translation.

[Celtic 137. Celtic Mythology]
Catalog Number: 1300
Tomás Ó Cathasaigh
Half course (fall term). M., W., (F.), at 1. EXAM GROUP: 6
A survey of the sources for the study of Celtic mythology, with special attention to selected texts from early Ireland and Wales.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A. All texts are read in English translation.

[Celtic 138. Mabinogion: Narrative Traditions of Medieval Wales]
Catalog Number: 6480
Catherine McKenna
Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13
An exploration of the Four Branches of the Mabinogi, Welsh Arthurian romances and tales, and the bardic lore associated with them, in the context of the literary culture of Wales in the twelfth through fourteenth centuries.
Note: Expected to be given in 2013–14. All texts are read in English translation.

[Celtic 151. The Literature of Medieval Celtic Christianity: The Hagiographical Tradition]
Catalog Number: 5560
Catherine McKenna
Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13
A study of selected texts associated with medieval saints’ cults in Ireland, Wales, Brittany and Scotland, including saints’ lives, voyage and vision narratives, hymns, prayers and poetry, in the context of the history of Christianity in the Celtic lands.

*Note:* Expected to be given in 2013–14. All texts are read in English translation.

**Celtic 164. Medieval and Early Modern Gaelic Society: Landscape, Settlement and Material Culture - (New Course)**

Catalog Number: 66462

Elizabeth FitzPatrick

*Half course (fall term). M., W., (F.), at 1. EXAM GROUP: 6*

This interdisciplinary course explores how the archaeology, literature and historical record of the Gaelic world can be used, in combination, to reconstruct a view of territory, settlement and material culture at different levels of the intensively hierarchical social structure of Gaelic society.

*Note:* Expected to be omitted in 2013–14. All texts are read in English translation.

**[Celtic 184. The Táin]**

Catalog Number: 2150

Tomás Ó Cathasaigh

*Half course (fall term). M., W., (F.), at 1. EXAM GROUP: 6*

A study of the exuberant Irish prose epic *Táin Bó Cúailnge* (‘Cattle-Raid of Cooley’).

*Note:* Expected to be given in 2014–15. Text read in English translation.

**Celtic 194. Celtic Bards and Their Poems**

Catalog Number: 66531

Catherine McKenna

*Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13*

This course explores the role of the bard in the Celtic-speaking societies of Wales, Ireland and Scotland. Through the study of narrative sources concerning the origin and nature of poets and poetry, theoretical and legal texts, and, most especially, bardic poems from the early Middle Ages through the eighteenth century, we examine the physical, public and political power of a medium-poetic verse-now associated with "power" in the private and emotional sense only. We study bardic poems in various modes - eulogistic, satiric, commemorative, prophetic - and we examine the circumstances that support the institution of bardic poetry and those that contribute to its decline. Among the issues to be considered are patronage, convention, the relationship of rhetoric and truth, and the functions of poetic form. All readings in English translation, but there will be some exposure to the forms of bardic poetry in the original languages.

*Note:* Expected to be omitted in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A. All texts are read in English translation.

**Celtic 195. Modern Scottish Gaelic Literature**

Catalog Number: 64236

Simon R. Innes

*Half course (fall term). M., W., (F.), at 12. EXAM GROUP: 5*

This course explores the interplay between innovation and tradition in Scottish Gaelic literature, and in particular poetry, since the nineteenth century. Topics include poetry of place, war poetry...
and contemporary poetry. Students must have taken at least one year of Scottish Gaelic language or equivalent.

*Note:* Expected to be omitted in 2013–14.

*Prerequisite:* Scottish Gaelic 131r or permission of instructor.

**Primarily for Graduates**

[Celtic 222. The Gaelic Manuscript Tradition]

Catalog Number: 1040

Simon R. Innes

*Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4*

This course explores the central role of Gaelic manuscripts for Celtic Studies. We examine form, content and usage while also considering historical context. Practice with traditional and non-traditional Gaelic hands form an important part of this course. We cover a wide range of periods and Gaelic manuscript traditions; from the earliest Irish glosses to early modern Scottish and Irish manuscripts. Issues to be explored include: transmission, patronage, scribal practice and modern editorial methodology.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Some knowledge of either Irish or Scottish Gaelic (of any period). Students with a knowledge of Latin may be admitted in consultation with the course instructor.

**Irish**

*For Undergraduates and Graduates*

[Irish 132. Introduction to Modern Irish]

Catalog Number: 6725

Simon R. Innes and others

*Half course (fall term). M. through W., F., at 12. EXAM GROUP: 5, 14*

An introduction to Irish as it is spoken and written today. Class work is participatory, and includes conversational role play and games as well as grammar study and drills. Audio and audiovisual resources reinforce pronunciation and aural comprehension. Songs, proverbs, and poems are an integral part of the course, introducing students to the vibrant oral and literary tradition of Gaelic Ireland.

*Note:* The combination of Irish 132 and 133r satisfies the language requirement. It is recommended in any case that this course be followed by Irish 133r. May not be taken Pass/Fail. Not open to auditors.

[Irish 133r. Intermediate Modern Irish]

Catalog Number: 6689

Simon R. Innes and others

*Half course (spring term). M. through W., F., at 12. EXAM GROUP: 5, 14*

A continuation of Irish 132, developing students’ fluency in spoken and written Irish. As our knowledge of the language expands, we venture into storytelling, journal writing and writing and performing short skits. Internet, audio and video resources complement the study of grammar and select prose texts.
2012-2013 Previous Courses of Instruction

Note: This course, when taken following Irish 132, satisfies the language requirement. May not be taken Pass/Fail. Not open to auditors.
Prerequisite: Irish 132 or permission of instructor.

[Irish 160. Advanced Modern Irish]
Catalog Number: 0704
Simon R. Innes and others
Half course (fall term). M. through W., F., at 12. EXAM GROUP: 5, 14
Geared to the interests and aptitudes of the participants, this course enhances students’ confidence in using Irish as a medium of oral and written communication and introduces them to the Gaelic literary tradition.
Note: Expected to be given in 2013–14. It is suggested that this course be followed by Irish 161r.
Prerequisite: Irish 133r or permission of instructor.

[Irish 161r. Continuing Advanced Modern Irish]
Catalog Number: 4421
Simon R. Innes and others
Half course (spring term). M. through W., F., at 12. EXAM GROUP: 5
Continuation of the fall term course.
Note: Expected to be given in 2013–14.
Prerequisite: Irish 160 or permission of instructor.

Primarily for Graduates

[Irish 200. Introduction to Old Irish]
Catalog Number: 8266
Tomás Ó Cathasaigh
Half course (fall term). M., W., F., at 3. EXAM GROUP: 8
An introduction to the language of the eighth and ninth centuries, with elementary readings in prose texts.
Note: Expected to be given in 2013–14. It is suggested that this course be followed by Irish 201r.

[Irish 201r. Continuing Old Irish]
Catalog Number: 6073
Tomás Ó Cathasaigh
Half course (spring term). M., W., F., at 3. EXAM GROUP: 8
Further grammatical study, with continued reading of saga texts.
Note: Expected to be given in 2013–14.
Prerequisite: Irish 200 or permission of the instructor.

[Irish 204r. Readings in Early Irish Poetry]
Catalog Number: 8493
Tomás Ó Cathasaigh
Half course (spring term). M., W., (F.), at 3. EXAM GROUP: 8
Readings in selected texts.
Note: Expected to be omitted in 2013–14.
Prerequisite: Irish 200 or permission of the instructor.

[Irish 205r. Readings in Early Irish Prose]
Catalog Number: 2705
Tomás Ó Cathasaigh
Half course (spring term). M., W., (F.), at 3. EXAM GROUP: 8
Readings in selected texts.
Note: Expected to be given in 2014–15.
Prerequisite: Irish 200 or permission of the instructor.

Scottish Gaelic

For Undergraduates and Graduates

[Scottish Gaelic 130. Introduction to Scottish Gaelic]
Catalog Number: 1846
Simon R. Innes
Half course (fall term). M. through W., F., at 9. EXAM GROUP: 2
An introduction to Gàidhlig (Scottish Gaelic) as it is spoken and written today. This course surveys the grammar while also emphasizing practice in speaking the language. This class is highly participatory; students are encouraged to take part in a range of communicative activities which enhance oral/aural ability. Translation exercises develop skills in the written language. A range of audio/ audiovisual materials and online resources is used to support student learning. Some attention is also given to the rich Gaelic song tradition, where it can assist with specific language points.
Note: Expected to be given in 2013–14. The combination of Scottish Gaelic 130 followed by Scottish Gaelic 131r satisfies the language requirement. It is recommended in any case that this course be followed by Scottish Gaelic 131r. May not be taken Pass/Fail. Not open to auditors.

[Scottish Gaelic 131r. Intermediate Scottish Gaelic]
Catalog Number: 4542
Simon R. Innes
Half course (spring term). M. through W., F., at 9. EXAM GROUP: 2
Direct continuation of the fall term course Scottish Gaelic 130.
Note: Expected to be given in 2013–14. This course, when taken following Scottish Gaelic 130, satisfies the language requirement. May not be taken Pass/Fail. Not open to auditors.
Prerequisite: Scottish Gaelic 130 or equivalent.

Welsh

For Undergraduates and Graduates

Welsh 128. Introduction to Modern Welsh
Catalog Number: 4148
Catherine McKenna and others
Half course (fall term). M. through W., F., at 10. EXAM GROUP: 3
Introduction to the Welsh language as spoken and written today, designed for those with little or no prior knowledge of this vibrant Celtic language. Intensive conversation practice is provided, and students learn to write fluently. Internet, audio and video exercises using dialogue, music and film augment a contextualized grammatical survey, and use of authentic literary texts increases as the course progresses.

Note: The combination of Welsh 128 followed by Welsh 129r satisfies the language requirement. It is recommended in any case that this course be followed by Welsh 129r. May not be taken Pass/Fail. Not open to auditors.

**Welsh 129r. Intermediate Modern Welsh**
Catalog Number: 4694
*Simon R. Innes and others*
Half course (spring term). M. through W., F., at 10. EXAM GROUP: 3
Direct continuation of Welsh 128, developing and deepening students’ knowledge of, and skill in, the modern spoken and written language. By the end of the semester students will be able to converse, read and write in a number of registers of idiomatic Welsh (academic, literary, informal). Various media, featuring dialogue, music and film, augment the advanced grammatical survey. Central cultural and historical issues are discussed.

Note: This course, when taken following Welsh 128, satisfies the language requirement. May not be taken Pass/Fail. Not open to auditors.

**Prerequisite:** Welsh 128 or permission of instructor.

**Primarily for Graduates**

**Welsh 225a. Medieval Welsh Language and Literature**
Catalog Number: 3960
*Catherine McKenna*
Half course (fall term). Tu., Th., at 2. EXAM GROUP: 16
Introduction to the language and culture of medieval Wales, with particular attention to narrative prose literature and its Celtic, Welsh and Norman contexts. By the end of the term we will have read in the original one of the *Four Branches of the Mabinogi* and selections from other texts.

Note: Expected to be omitted in 2013–14. It is suggested that this course be followed by Welsh 225b.

**Welsh 225b. Medieval Welsh Poetry**
Catalog Number: 4167
*Patrick K. Ford*
Half course (spring term). Tu., Th., at 2. EXAM GROUP: 16
Continued readings in medieval Welsh prose and an introduction to Welsh poetry down to 1400. Continued study of grammar and practice in translation, as well as an introduction to the manuscript sources of the poetry and their cultural contexts, and the intricacies of medieval Welsh poetics.

Note: Expected to be omitted in 2013–14.

**Prerequisite:** Welsh 225a or equivalent preparation in Middle Welsh.
[Welsh 226r. Readings in Middle Welsh Prose]
Catalog Number: 2796
Catherine McKenna
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
An exploration of the enormous variety of medieval Welsh prose literature: selections from tales and romances, chronicles, laws, and lore.
Note: Expected to be given in 2013–14.
Prerequisite: Welsh 225b or permission of the instructor.

[Welsh 227. Seminar: Welsh Bardic Poetry]
Catalog Number: 2580
Catherine McKenna
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Readings from the hengerdd, the beirdd y twysogion and the beirdd yr uchelwyr; consideration of the social and political contexts of their poetry, its forms, and its relationship to other medieval European poetic traditions.
Note: Expected to be given in 2013–14.
Prerequisite: Knowledge of Welsh or permission of the instructor.

Cross-listed Courses

[Medieval Studies 201 (formerly Medieval Studies 101). The Auxiliary Disciplines of Medieval History: Proseminar]
[Scandinavian 160a. Old Norse Language, Literature, and Culture: The Viking Legacy]
[Scandinavian 160br. Old Norse Language, Literature, and Culture: Mythology]

Graduate Courses of Reading and Research

*Celtic 300. Reading and Research
Catalog Number: 5614
Simon R. Innes 6734, Catherine McKenna 5253 (on leave spring term), and Tomás Ó Cathasaigh 1224 (on leave fall term)

*Celtic 305. Preparation of Doctoral Dissertation
Catalog Number: 0375
Catherine McKenna 5253 (on leave spring term) and Tomás Ó Cathasaigh 1224 (on leave fall term)

Chemical and Physical Biology
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Degrees in Chemical and Physical Biology

Erin K. O’Shea, Paul C. Mangelsdorf Professor of Molecular and Cellular Biology and of Chemistry and Chemical Biology (Chair)
Michael P. Brenner, Glover Professor of Applied Mathematics and Applied Physics, Harvard College Professor, Area Dean for Applied Mathematics
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of Physics
Rachelle Gaudet, Professor of Molecular and Cellular Biology
Stephen C. Harrison, Giovanni Armenise - Harvard Professor of Basic Biomedical Science (Medical School)
Daniel E. Kahne, Professor of Chemistry and Chemical Biology
Andrew W. Murray, Herchel Smith Professor of Molecular Genetics
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of Applied Physics and of Molecular and Cellular Biology
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Pardis Sabeti, Associate Professor of Organismic and Evolutionary Biology
Alan Saghatelian, Associate Professor of Chemistry and Chemical Biology
Gregory C. Tucci, Senior Lecturer on Chemistry and Chemical Biology

Other Faculty Offering Instruction in Chemical and Physical Biology

A. Thomas Torello, Lecturer on Molecular and Cellular Biology

The Chemical and Physical Biology (CPB) concentration provides students with a broad foundation in the physical and life sciences. This concentration is designed for students interested in applying quantitative tools, physical concepts, and chemical principles to the study of biology. Students who are interested in understanding living systems in detail will require considerable proficiency in mathematics and physics as well as a broad background in both chemistry and biology. In its emphasis on quantitative, physical, and chemical tools, this concentration represents a significant departure from traditional undergraduate programs of study in the biological and life sciences. Our goal is to provide the next generation of life scientists with the background needed to make new advances in the quantitative understanding of living systems. The CPB concentration is intended primarily for students considering careers in research. The concentration is administered by the Department of Molecular and Cellular Biology and overseen by a Standing Committee, which includes representatives from several departments of the Faculty of Arts and Sciences and from other schools as appropriate to ensure the required breadth of the program. For more information about the Chemical and Physical Biology Concentration, please visit the CPB Life Sciences Page.
Primarily for Undergraduates

**Chemical and Physical Biology 91r. Introduction to Research**
Catalog Number: 9168
A. Thomas Torello

*Half course (fall term; repeated spring term). Hours to be arranged.*
Laboratory research in topics related to the CPB concentration under the direction of, or approved by, members of the Board of Tutors in CPB. A paper must be submitted to the laboratory sponsor and to the CPB Student Affairs Office for review by the Head Tutor and Course Director.

*Note:* Limited to CPB concentrators; written permission of both the tutor and laboratory sponsor must be submitted to the CPB Concentration Office prior to enrolling in the course. Ordinarily may not be taken as a fifth course.

**Chemical and Physical Biology 99. Laboratory Research for Honors Thesis**
Catalog Number: 7918
A. Thomas Torello

*Full course (indivisible). Hours to be arranged.*
For honors candidates writing a thesis in CPB. Indivisible for students enrolling in the fall term. Students intending to enroll in the fall are required to submit a written proposal to the Course Director. Students may enter the course at midyear only with the permission of the Course Director. The thesis proposal must be approved by the Course Director and Head Tutors prior to enrolling in CPB 99. Ordinarily may not be taken as a fifth course.

Chemical Biology

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

Faculty of the Committee on Higher Degrees in Chemical Biology

Daniel E. Kahne, Professor of Chemistry and Chemical Biology *(Co-Chair)*
Suzanne Walker, Professor of Microbiology and Immunobiology *(Medical School) (Co-Chair)*
Rachelle Gaudet, Professor of Molecular and Cellular Biology
David R. Liu, Professor of Chemistry and Chemical Biology, Harvard College Professor
Timothy J. Mitchison, Hasib Sabbagh Professor of Systems Biology *(Medical School)*
Stuart L. Schreiber, Morris Loeb Professor of Chemistry

Other Faculty Offering Instruction in Chemical Biology
Cecile Andree Beguin, Assistant Professor of Psychiatry (Medical School)
Stephen C. Blacklow, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
James Elliott Bradner, Assistant Professor of Medicine (Medical School)
Jon Clardy, Hsien Wu and Daisy Yen Wu Professor of Biological Chemistry and Molecular Pharmacology, Affiliate of the Department of Chemistry and Chemical Biology (Medical School)
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Vladimir Denic, Associate Professor of Molecular and Cellular Biology
David E. Golan, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Nathanael Gray, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Marcia C. Haigis, Assistant Professor of Pathology (Medical School)
Jacob M. Hooker, Assistant Professor of Radiology (Medical School)
Deborah Tan Hung, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Eric N. Jacobsen, Sheldon Emery Professor of Chemistry
Randy King, Harry C. McKenzie Associate Professor of Cell Biology (Medical School)
Roy Kishony, Associate Professor of Systems Biology (Medical School)
Stephen Daniel Liberles, Assistant Professor of Cell Biology (Medical School)
Ralph Mazitschek, Assistant Professor of Radiology (Medical School)
Andrew G. Myers, Amory Houghton Professor of Chemistry and Chemical Biology
Erin K. O’Shea, Paul C. Mangelsdorf Professor of Molecular and Cellular Biology and of Chemistry and Chemical Biology
Randall Theodore Peterson, Associate Professor of Medicine (Medical School)
Tobias Ritter, Professor of Chemistry and Chemical Biology
Thomas M. Roberts, Professor of Pathology (Medical School)
Alan Saghatelian, Associate Professor of Chemistry and Chemical Biology
Adrian Salic, Assistant Professor on Cell Biology (Medical School)
Matthew D. Shair, Professor of Chemistry and Chemical Biology
Pamela A. Silver, Elliott T. and Onie H. Adams Professor of Biochemistry and Systems Biology (Medical School)
Piotr Sliz, Assistant Professor of Pediatrics (Medical School)
Gregory L. Verdine, Erving Professor of Chemistry in the Departments of Stem Cell and Regenerative Biology and of Chemistry and Chemical Biology
Loren D. Walensky, Assistant Professor of Pediatrics (Medical School)
Hao Wu, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Xiaoliang Sunney Xie, Mallinckrodt Professor of Chemistry and Chemical Biology
Priscilla Yang, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics
Leonard I. Zon, Professor of Stem Cell and Regenerative Biology and Grousbeck Professor of Pediatrics, Harvard Medical School (Medical School)

Primarily for Graduates
[Chemical Biology 201. Introduction to Scientific Computing with Python and Matlab]
Catalog Number: 69548 Enrollment: Limited to 15.
Ian Stokes-Rees and Piotr Sliz (Medical School)
Half course (fall term). Tu., Th., 9–10:30. EXAM GROUP: 11, 12
Targeted at scientists with little experience in computer programming/computational techniques for data processing, analysis, algorithm/model development, or visualization. Will equip participants with tools to integrate disparate data sources, analyze data, and produce quality graphics.
Note: Expected to be given in 2013–14. Foundations in computer programming and scripting will also be covered. The course will primarily utilize Python, with some topics using Matlab.

[Chemical Biology 207. Molecular Approaches to Drug Action, Discovery, and Design]
Catalog Number: 4030 Enrollment: May be limited.
Donald M. Coen (Medical School), Nathanael Gray (Medical School), Suzanne Walker (Medical School), Timothy J. Mitchison (Medical School) and members of the Committee
Half course (spring term). Tu., Th., 3:30–5:30. EXAM GROUP: 17, 18
Application of molecular, systems, and structural biology, genetics, genomics, enzymology, and chemistry to drug action and development of new therapies. Analyzes molecular underpinnings of pharmacological principles. Examples drawn from diseases including cancer and AIDS.
Note: Expected to be given in 2013–14.

*Chemical Biology 2200. Introduction to Chemical Biology
Catalog Number: 3459 Enrollment: Limited to 15.
James Elliott Bradner (Medical School) and Ralph Mazitschek (Medical School)
Half course (spring term). M., through F., 9am - 5pm (January 7-18, 2013).
This course will provide a survey of major topics, technologies, and themes in Chemical Biology, with hands-on exposure to a variety of experimental approaches.
Note: Intended for first-year graduate students in the Chemical Biology Program; permission of the instructor required for all others. Course must be taken Sat/Unsat.

Cross-listed Courses
BCMP 200. Molecular Biology
BCMP 201. Biological Macromolecules: Structure, Function and Pathways
BCMP 230. Principles and Practice of Drug Development
[Biophysics 101 (Genomics and Computational Biology). Computational Biology]
Cell Biology 201. Molecular Biology of the Cell
*Chemistry 106 (formerly *Chemistry 206). Advanced Organic Chemistry
Chemistry 135. Experimental Synthetic Chemistry
Chemistry 163. Frontiers in Biophysics
*Chemistry 170 (formerly *Chemistry 270). Chemical Biology
Genetics 201. Principles of Genetics
Neurobiology 200. Neurobiology
[*SCRB 185 (formerly *Chemistry 185). Human Disease]
[Systems Biology 205. Synthetic Biology]
Virology 201. Virology

Graduate Courses of Reading and Research

*Chemical Biology 300hf. Introduction to Chemical Biology Research
Catalog Number: 95622 Enrollment: This course is limited to first year students in the Chemical Biology Program.
Suzanne Walker (Medical School) 5087 and members of the Committee
Half course (throughout the year). Spring: W., 4:30–6.
Lectures introduce the research areas of current program faculty in Chemical Biology.

*Chemical Biology 350. Chemical Biology Research
Catalog Number: 9668
Members of the Committee
Upper level Chemical Biology students register for this course when they permanently join a lab. Students should register under the supervising PI.

*Chemical Biology 370. Advanced Topics in Chemical Biology
Catalog Number: 74314
Daniel E. Kahne 5065 and Suzanne Walker (Medical School) 5087
A series of reading and discussion seminars, each running for a half term (7 weeks). Two seminars, which can be taken in different terms, are required for credit.

*Chemical Biology 399. Introduction to Laboratory Research
Catalog Number: 1888
Suzanne Walker (Medical School) 5087 and Daniel E. Kahne 5065
This course is intended for Chemical Biology lab rotations.

Chemical Physics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on the Degree of Doctor of Philosophy in Chemical Physics

Eric J. Heller, Abbott and James Lawrence Professor of Chemistry and Professor of Physics (Chair) (on leave fall term)
Alán Aspuru-Guzik, Associate Professor of Chemistry and Chemical Biology
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
John M. Doyle, Professor of Physics
Roy G. Gordon, Thomas Dudley Cabot Professor of Chemistry and Professor of Materials Science
Mikhail D. Lukin, Professor of Physics (on leave spring term)
David R. Nelson, Arthur K. Solomon Professor of Biophysics and Professor of Physics and Applied Physics (on leave spring term)
Eugene I. Shakhnovich, Professor of Chemistry and Chemical Biology
Xiaoliang Sunney Xie, Mallinckrodt Professor of Chemistry and Chemical Biology
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

The degree of Doctor of Philosophy in Chemical Physics is offered to students with undergraduate education in chemistry or physics. It provides a program of study and research in joint areas of physics and chemistry. The Committee in Chemical Physics serves to aid students interested in chemical physics plan their program of graduate studies. The program of research leading to the PhD may be carried out under the direction of members of the departments of Chemistry, Physics, Astronomy, and the School of Engineering and Applied Sciences who have interests in chemical physics. Specific information may be obtained from any member of the committee and from the Department of Chemistry Information Office.

Chemistry and Chemical Biology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Chemistry and Chemical Biology

Eric N. Jacobsen, Sheldon Emery Professor of Chemistry (Chair)
Joanna Aizenberg, Amy Smith Berylson Professor of Materials Science
James G. Anderson, Philip S. Weld Professor of Atmospheric Chemistry
Alán Aspuru-Guzik, Associate Professor of Chemistry and Chemical Biology
Emily Patricia Balskus, Assistant Professor of Chemistry and Chemical Biology
Theodore A. Betley, Thomas D. Cabot Associate Professor of Chemistry and Chemical Biology
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Cynthia M. Friend, Theodore William Richards Professor of Chemistry and Professor of Materials Science
Roy G. Gordon, Thomas Dudley Cabot Professor of Chemistry and Professor of Materials Science
Eric J. Heller, Abbott and James Lawrence Professor of Chemistry and Professor of Physics (on leave fall term)
Daniel E. Kahne, Professor of Chemistry and Chemical Biology (Director of Undergraduate)
Studies)
Eugene Elliott Kwan, Lecturer on Chemistry and Chemical Biology
Charles M. Lieber, Mark Hyman, Jr. Professor of Chemistry
David R. Liu, Professor of Chemistry and Chemical Biology, Harvard College Professor
Luis Alberto Montero Cabrera, Visiting Professor of Chemistry and Chemical Biology
Andrew G. Myers, Amory Houghton Professor of Chemistry and Chemical Biology
Daniel Nocera, Visiting Professor of Chemistry and Chemical Biology, Patterson Rockwood Professor of Energy
Erin K. O’Shea, Paul C. Mangelsdorf Professor of Molecular and Cellular Biology and of Chemistry and Chemical Biology
Hongkun Park, Professor of Chemistry and Chemical Biology and of Physics
Dmitrij Rappoport, Lecturer on Chemistry and Chemical Biology
Tobias Ritter, Professor of Chemistry and Chemical Biology
Hossein R. Sadeghpour, Lecturer on Chemistry and Chemical Biology
Alan Saghatelian, Associate Professor of Chemistry and Chemical Biology
Guiliano Scarcelli, Lecturer on Chemistry and Chemical Biology
Stuart L. Schreiber, Morris Loeb Professor of Chemistry
Matthew D. Shair, Professor of Chemistry and Chemical Biology (Director of Graduate Studies)
Eugene I. Shakhnovich, Professor of Chemistry and Chemical Biology
Ryan M. Spoering, Lecturer on Chemistry and Chemical Biology
Marie Colleen Spong, Preceptor in Chemistry and Chemical Biology
Jack Szostak, Professor of Chemistry and Chemical Biology; Professor of Genetics (Medical School)
Gregory C. Tucci, Senior Lecturer on Chemistry and Chemical Biology
Gregory L. Verdine, Erving Professor of Chemistry in the Departments of Stem Cell and Regenerative Biology and of Chemistry and Chemical Biology
George M. Whitesides, Woodford L. and Ann A. Flowers University Professor
Xiaoliang Sunney Xie, Mallinckrodt Professor of Chemistry and Chemical Biology
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

Other Faculty Offering Instruction in the Department of Chemistry and Chemical Biology

Tamara J. Brenner, Lecturer on Molecular and Cellular Biology, Associate Director of Life Sciences Education
Conor L. Evans, Assistant Professor of Dermatology (Medical School)
David A. Evans, Abbott and James Lawrence Professor of Chemistry, Emeritus
Dudley R. Herschbach, Frank B. Baird, Jr. Professor of Science, Emeritus
Jacob M. Hooker, Assistant Professor of Radiology (Medical School)
Robert A. Lue, Professor of the Practice of Molecular and Cellular Biology
Gavin MacBeath, Lecturer on Systems Biology (Medical School)
Susan Mango, Professor of Molecular and Cellular Biology
Logan S. McCarty, Lecturer on Physics, Lecturer on Chemistry and Chemical Biology
M.-Christina White
Shao-Liang Zheng

Affiliates of the Department of Chemistry and Chemical Biology
Jon Clardy, Hsien Wu and Daisy Yen Wu Professor of Biological Chemistry and Molecular Pharmacology, Affiliate of the Department of Chemistry and Chemical Biology (Medical School)
Suzanne Walker, Professor of Microbiology and Immunobiology (Medical School)
Efthimios Kaxiras, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Affiliate of the Department of Chemistry and Chemical Biology
Christopher T. Walsh, Hamilton Kuhn Professor of Biological Chemistry and Molecular Pharmacology (Medical School)

Incoming students should take advantage of Harvard’s Chemistry and Life Sciences Placement Test, as well as the science advising available in the Science Center the week before classes begin. Members of the Life and Physical Sciences departments will be available during this period to advise students. The Harvard Chemistry and Life Sciences Placement Test results recommend the appropriate starting level course for students interested in chemistry: Life and Physical Sciences A, Life Sciences 1a and/or Physical Sciences 10, or Chemistry 17/20.

Certain courses in biochemistry and biophysics are listed under Molecular and Cellular Biology or Biophysics (see cross-listings at end of middle group course section.). The School of Engineering and Applied Sciences, the Department of Physics, and the Department of Earth and Planetary Sciences also list a number of courses of interest to chemists.

**Primarily for Undergraduates**

Because of the sequence of prerequisites for chemistry courses, the Department strongly recommends some work in mathematics as well as chemistry in the first year. Freshmen contemplating this program should consult a member of the Chemistry Department in planning their first year. Advice may be obtained in the Co-Director of Undergraduate Studies’ Office, Science Center 114.

**Life and Physical Sciences**

**Life and Physical Sciences A, Foundational Chemistry and Biology**
Catalog Number: 3956
Gregory C. Tucci and Tamara J. Brenner
Half course (fall term). M., W., F., at 9, and a weekly one-hour of discussion section, three-hour lab, and one-hour of review session. EXAM GROUP: 2
This course introduces fundamental concepts in chemistry and biology. Topics in chemistry include stoichiometry, acids and bases, aqueous solutions, gases, thermochemistry, electrons in atoms, and chemical bonding. Topics in biology include the transfer of information from DNA to RNA to protein, genetic inheritance, mitosis and meiosis, and cell structure.
**Note:** Students should use their scores on the Chemistry and Biology Placement Tests to determine whether to enroll in Life and Physical Sciences A or Life Sciences 1a. This course assumes fluency with high school algebra. Students who have completed Life Sciences 1a, Physical Sciences 1, Chemistry 17 or Chemistry 20 may not take Life and Physical Sciences A for credit. This course, when taken for a letter grade, meets the General Education Requirement
for Science of Living Systems. This course, when taken for a letter grade, meets the Core area requirement for either Science A or Science B, but not both.

**Life Sciences 1a. An Integrated Introduction to the Life Sciences: Chemistry, Molecular Biology, and Cell Biology**

Catalog Number: 2137

*Robert A. Lue, Daniel E. Kahne, and Susan Mango*

*Half course (fall term). Session 1: Tu., Th., 10-11:30, or Session 2: Tu., Th., 1-2:30, and three hours of laboratory/discussion weekly. EXAM GROUP: 12, 13*

What are the fundamental features of living systems? What are the molecules imparting them and how do their chemical properties explain their biological roles? The answers form a basis for understanding the molecules of life, the cell, diseases, and medicines. In contrast with traditional presentations of relevant scientific disciplines in separate courses, we take an integrated approach, presenting chemistry, molecular biology, biochemistry, and cell biology framed within central problems such as the biology of HIV and cancer.

*Note:* The lecture component of this course will be taught in two separate sessions, and by the same instructors. Students will sign up for one lecture session based on their scheduling needs, and will be required to attend only that session for the entire term. For more information about the assignment process, please see the course website in the fall. This course, in combination with Life Sciences 1b, constitutes an integrated introduction to the Life Sciences. This course, when taken for a letter grade, meets the General Education requirement in Science of Living Systems or the Core area requirement for Science A.

**Physical Sciences 1. Chemical Bonding, Energy, and Reactivity: An Introduction to the Physical Sciences**

Catalog Number: 2225

*Álán Aspuru-Guzik and Hongkun Park*

*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*

This course covers the chemistry and physics underlying molecular phenomena in the world around you. Starting from a single electron, we will build up to atoms, molecules, and materials. We will study interactions of molecules through thermochemistry, equilibria, entropy and free energy, acids and bases, electrochemistry, and kinetics. We will apply these concepts to (1) world energy demands and global climate change (2) application of physical principles in biology, and (3) modern materials and technology.

*Note:* This course is part of an integrated introduction to the physical science intended for students who plan to pursue a concentration in the physical or life sciences and/or satisfy pre-medical requirements in Chemistry. May not be counted toward a degree in addition to the former Chemistry 7. Students interested in Physical Sciences 1 should take the Chemistry Placement Exam. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A. *Prerequisite:* A few operations of calculus are developed and used. Fluency in pre-calculus secondary school mathematics is assumed. Students are expected to have AP or honors level high school chemistry, or have completed Life and Physical Sciences A (LPS A) with a satisfactory grade.

**Physical Sciences 2. Mechanics, Elasticity, Fluids, and Diffusion**

Catalog Number: 6053

*Logan S. McCarty*
Half course (fall term). Tu., Th., 9:30-11, and a weekly section and lab to be arranged. EXAM GROUP: 11, 12

An introduction to classical mechanics, with special emphasis on the motion of organisms in fluids. Topics covered include: kinematics, Newton’s laws of motion, oscillations, elasticity, random walks, diffusion, and fluids. Examples and problem set questions will be drawn from the life sciences and medicine.

Note: This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Physical Sciences 1 (or Chemistry 7), Mathematics 1b, or the equivalent.

Physical Sciences 3. Electromagnetism, Circuits, Waves, Optics, and Imaging
Catalog Number: 5262
Logan S. McCarty

Half course (spring term). Tu., Th., 9:30-11, and a weekly section and lab to be arranged. EXAM GROUP: 11, 12

This course is an introduction to electromagnetism, digital information, waves, optics and sound. Topics covered include: electric and magnetic fields, electrical potential, circuits, simple digital circuits, wave propagation in various media, microscopy, sound and hearing. The course will draw upon a variety of applications to the biological sciences and will use real-world examples to illustrate many of the physical principles described. There are six laboratories.

Note: This course is part of an integrated introduction to the physical sciences intended for students who plan to pursue a concentration in the life sciences and/or satisfy pre-medical requirements in Physics. May not ordinarily be taken for credit in addition to Physics 1b, 11b, or 15b. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Physical Sciences 2 (or Physics 1a or 11a), Mathematics 1b, or equivalent.

Physical Sciences 10. Chemistry: A Microscopic Perspective on Molecules, Materials, and Life
Catalog Number: 75544
Adam E. Cohen and Logan S. McCarty

Half course (fall term). M., W., F., at 10 and a weekly section and lab to be arranged. EXAM GROUP: 3

An introduction to the fundamental theories of quantum mechanics and statistical mechanics and their role in governing the behavior of matter. The course begins with the quantum behavior of a single electron and develops the elements of the periodic table, the nature of the chemical bond, and the bulk properties of materials. Applications include semiconductor electronics, solar energy conversion, medical imaging, and the stability and dynamism of living systems. Calculus will be used extensively.

Note: Physical Sciences 10 and Physical Sciences 11 may be taken in any order. The general chemistry requirement for medical school can be satisfied with any two of the following courses: Life and Physical Sciences A, Life Sciences 1a, Physical Sciences 1, Physical Sciences 10, or Physical Sciences 11. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.
Prerequisite: A strong background in chemistry (Chemistry AP score of 5, or Physical Sciences 1, or equivalent preparation), mathematics at the level of Mathematics 1b (may be taken concurrently), and some familiarity with physics (force, energy, work, and electric charge).

Physical Sciences 11. Foundations and Frontiers of Modern Chemistry: A Molecular and Global Perspective
Catalog Number: 24022
James G. Anderson and Gregory C. Tucci
Half course (spring term). M., W., F., at 10 and a weekly section and lab to be arranged.
The Physical Sciences hold the key to solving unprecedented problems at the intersection of science, technology, and an array of rapidly emerging global scale challenges. The course emphasizes a molecular scale understanding of energy and entropy; free energy in equilibria, acid/base reactivity, and electrochemistry; molecular bonding and kinetics; catalysis in organic and inorganic systems; the union of quantum mechanics, nanostructures, and photovoltaics; and the analysis of nuclear energy. Case studies are used both to develop quantitative reasoning and to directly link these principles to global strategies.
Note: Physical Sciences 10 and Physical Sciences 11 may be taken in any order. The general chemistry requirement for medical students can be satisfied with any two of the following courses: Life and Physical Sciences A, Life Sciences 1a, Physical Sciences 1, Physical Sciences 10, or Physical Sciences 11. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.
Prerequisite: A strong background in chemistry. Students are expected to have had Honors or AP-level high school chemistry preparation or a placement score of 650 or better on the Harvard Chemistry Placement exam. A few operations of calculus are developed and used. Fluency in pre-calculus secondary school mathematics is assumed.

Primarily for Undergraduates
Because of the sequence of prerequisites for chemistry courses, the Department strongly recommends some work in mathematics as well as chemistry in the first year. Freshmen contemplating this program are urged to consult a member of the Chemistry Department in planning their work for the first year. Advice may be obtained in the Associate Director of Undergraduate Studies’ Office, Science Center 114.

Chemistry 17. Principles of Organic Chemistry
Catalog Number: 5085
Eric N. Jacobsen
Half course (fall term). M., W., F., at 11, and a weekly section to be arranged. EXAM GROUP: 4
An introduction to organic chemistry, with an emphasis on structure and bonding, reaction mechanisms, and chemical reactivity.
Note: The Chemistry 17/27 sequence is intended primarily for students in the life sciences, who have completed LS1a and one of the PS courses (PS1, PS10, PS11). The Chemistry 20/30 sequence is intended primarily for students planning a concentration in Chemistry or the physical sciences. Either sequence satisfies the organic chemistry requirement for medical school. Students may not count both Chemistry 17 and Chemistry 20 for degree credit. On the other
hand, Chemistry 27 and Chemistry 30 cover different material, so students may choose to take both courses for degree credit; students should ordinarily take the third half course only after completing either the 17/27 or 20/30 sequence. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Open to freshmen with a score of 750 or higher in the College Boards or the Chemistry Placement Examination; to students who scored 4 or 5 on the Chemistry Advanced Placement Examination; and to students who achieved a grade of B or higher in either Physical Sciences 1, 10, 11, or another college-level introductory chemistry course. Others may enter only by permission of the instructor.

Chemistry 20. Organic Chemistry
Catalog Number: 0876
Ryan M. Spoering
Half course (spring term). M., W., F., at 9, a one-hour weekly discussion section, and five-hour bi-weekly lab sections to be arranged. EXAM GROUP: 2
An introduction to structure and bonding in organic molecules; mechanisms of organic reactions; chemical transformations of the functional groups of organic chemistry; synthesis; determination of chemical structures by infrared and NMR spectroscopy.
Note: Chemistry 20/30 is an integrated two-semester sequence that prepares students to study chemistry and other physical sciences, whereas the Chemistry 17/27 sequence focuses on application of organic chemistry concepts to the life sciences. Either sequence satisfies the organic chemistry requirement for medical school and the chemistry concentration. The content of Chemistry 17 is accelerated and overlaps with topics from both Chemistry 20 and 30. Students may not count both Chemistry 17 and 20 toward the degree. However, Chemistry 27 and Chemistry 20/30 cover different material, so students may choose to take Chemistry 27 after completing the 20/30 sequence. This course, when taken for a letter grade, meets the Core area requirement for Science A.
Prerequisite: Open to students who scored 4 or 5 on the Chemistry Advanced Placement Examination, or who earned an A or A- grade in Life Sciences 1A or Life and Physical Sciences A. Others should contact the instructor to discuss their preparation.

Chemistry 27. Organic Chemistry of Life
Catalog Number: 5978
Emily Patricia Balskus
Half course (spring term). M., W., 2:30-4, and a weekly section and five-hour laboratory to be arranged. EXAM GROUP: 7, 8
Chemical principles that govern the processes driving living systems are illustrated with examples drawn from biochemistry, cell biology, and medicine. The course deals with organic chemical reactivity (reaction mechanisms, structure-reactivity relationships), with matters specifically relevant to the life sciences (chemistry of proteins, nucleic acids, drugs, natural products, cofactors, signal transduction), and with applications of chemical biology to medicine and biotechnology. An understanding of organic reactions and their "arrow" pushing mechanisms is required.
Note: Chemistry 27 and 30 may both be taken for degree credit. See note for Chemistry 17. This course, when taken for a letter grade, meets the General Education requirement for Science of
Living Systems or the Core area requirement for Science A.
Prerequisite: Chemistry 17 or Chemistry 30 or Chemistry 20 with permission of the instructor.

**Chemistry 30. Organic Chemistry**
Catalog Number: 6587
Andrew G. Myers
Half course (fall term). Lectures M., W., F., at 11, and laboratory, four to six hours a week, to be arranged. EXAM GROUP: 4
Continuation of Chemistry 20. Fundamental principles and advanced topics in organic chemistry. Carbonyl chemistry and pericyclic reactions are covered in particular detail, using principles of stereochemistry, stereoelectronic theory, and molecular orbital theory as a foundation. Students learn about strategies in multi-step organic synthesis and are given an introduction into organometallic chemistry. Laboratory: an introduction to organic chemistry laboratory techniques and experimental organic synthesis.
Note: Chemistry 27 and 30 may both be taken for degree credit. See note for Chemistry 17. This course, when taken for a letter grade, meets the Core area requirement for Science A.
Prerequisite: Chemistry 20 or equivalent.

**Chemistry 40. Inorganic Chemistry**
Catalog Number: 8201
Theodore A. Betley
Half course (spring term). M., W., F., at 9. EXAM GROUP: 2
An introduction to basic concepts of inorganic chemistry. Develops principles of chemical bonding and molecular structure on a basis of symmetry, applying these concepts to coordination chemistry (highlighting synthesis), organometallic chemistry (applications to catalysis), materials synthesis, and bioinorganic processes.
Prerequisite: Chemistry 17 or 20.

**Chemistry 60. Foundations of Physical Chemistry**
Catalog Number: 5181
Roy G. Gordon
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
A compact introduction to major principles of physical chemistry (statistical mechanics, thermodynamics, and chemical kinetics), concurrently providing mathematical and physical foundations for these subjects and preparation for Chemistry 160 and 161.
Prerequisite: Physical Sciences 1 or equivalent; completion or concurrent enrollment in Mathematics 21a or Applied Mathematics 21a; completion or concurrent enrollment in Physics 11a or equivalent.

*Chemistry 91r. Introduction to Research*
Catalog Number: 4366
Gregory C. Tucci and members of the Department
Half course (fall term; repeated spring term). Spring: Tu., Th., at 1. EXAM GROUP: Spring: 15
Reading and/or laboratory work related to one of the research projects under way in the department.
Note: Open to a limited number of chemistry concentrators who are accepted as research
students without having taken Chemistry 98. Written permission of the sponsor must be filed at the Office of the Associate Director of Undergraduate Studies in Chemistry. Any student enrolling in this course must register the name of his or her research mentor with the course head whose signature must appear on each student’s study card. Must be taken Sat/Unsat.

*Chemistry 98r. Introduction to Research—Junior Year
Catalog Number: 3124
Gregory C. Tucci and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged; Spring: Tu., Th., at 1.
EXAM GROUP: Spring: 15
Research under the direction of, or approved by, a member of the faculty of the Department of Chemistry.
Note: Open with permission of the instructor to junior chemistry majors who have satisfactorily completed the non-credit Introduction to Research Tutorial in the spring term of the sophomore year. In that non-credit spring term tutorial, taught Tu., Th., 1-2:30, students will attend introductory lectures and research seminars in order to acquaint themselves with departmental research programs. In the junior year, students who complete the non-credit tutorial and obtain placement in a research laboratory will undertake research as Chemistry 98r. Written permission of the research adviser must be filed at the office of the Associate Director of Undergraduate Studies in Chemistry. Any student enrolling in this course must register the name of his or her research mentor with the course head whose signature must appear on each student’s study card.

*Chemistry 99r. Tutorial—Senior Year
Catalog Number: 4508
Gregory C. Tucci and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Research under the direction of, or approved by, a member of the faculty of the Department of Chemistry.
Note: Open to seniors accredited by the Department as honors candidates. Students enrolled in Chemistry 99r have the option of writing a thesis. Written permission of the research adviser must be filed at the office of the Associate Director of Undergraduate Studies in Chemistry. Any student enrolling in this course must register the name of his or her research mentor with the course head whose signature must appear on each student’s study card.

Cross-listed Courses

Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution
MCB 52. Molecular Biology

For Undergraduates and Graduates

*Chemistry 100r. Experimental Chemistry and Chemical Biology
Catalog Number: 7796
Ryan M. Spoering
Half course (fall term; repeated spring term). M., 4, and two five-hour labs each week. EXAM
GROUP: 9
A laboratory course where students carry out research. Projects will be drawn directly from faculty covering a range of methodologies in chemistry and chemical biology. Students will discuss their progress and write formal reports.

Note: Open to freshmen, sophomores, juniors, and seniors, regardless of concentration, and suitable for students either with or without extensive laboratory experience.

Prerequisite: Chemistry 30 or Chemistry 27, and permission of the instructor.

**Chemistry 101 (formerly Chemistry 201). Organic Synthesis Towards a Genomic Medicine**
Catalog Number: 7505
Stuart L. Schreiber
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Organic Synthesis Towards a Genomic Medicine teaches advanced students in chemistry and chemical biology: 1) the principles that underlie modern organic synthesis, chemical biology and genome biology, and 2) the resulting development of a new interdisciplinary field -- genomic medicine. Genomic medicine aims to understand human biology and to transform human health by using small molecules that target the root causes of disease. For example, the course will explore how organic synthesis is enabling patient-based drug discovery, where genetic signatures of disease are related to drug sensitivity in the context of cancer, diabetes, infectious disease and psychiatric disease, among others.

Prerequisite: Chemistry 17/27, Chemistry 20/30, or the equivalent

**Chemistry 106 (formerly *Chemistry 206). Advanced Organic Chemistry**
Catalog Number: 1063
Eugene Elliott Kwan
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
This course will survey modern organic chemistry from a fundamental perspective. The foundations of structure and bonding, donor-acceptor interactions, and conformational analysis will be considered in the context of pericyclic reactions and cyclic and acyclic stereocentration. The behavior of reactive intermediates, the basis for enantioselective catalysis, and patterns in functional group reactivity will also be discussed.

Prerequisite: Chemistry 30 or permission of instructor.

Catalog Number: 0480
Matthew D. Shair
Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8
An integrated course in complex synthetic problem solving that focuses on the development of principles and strategies for synthesis design with a concurrent, comprehensive review of modern synthetic transformations.

Prerequisite: A grade of A in Chemistry 30.

[Chemistry 117 (formerly Chemistry 217). Practical NMR Spectroscopy]}
Catalog Number: 1061
Eugene Elliott Kwan
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
This course examines the application of modern NMR spectroscopic techniques to the structural elucidation of small molecules. Both the practical and theoretical aspects of 1D and 2D NMR experiments will be explored. Topics include: the chemical shift; coupling constants; the nuclear Overhauser effect and relaxation; chemical exchange; 2D homonuclear and heteronuclear correlation; analysis of complex molecules with overlapping signals and data tabulation; analysis of reactive intermediates; kinetics by NMR; the Fourier transform; quadrature detection; phase-sensitive detection; the vector model; the density matrix and the product operator formalism; pulsed field gradients; and spectrometer instrumentation.

Note: Expected to be given in 2013–14.
Prerequisite: Chemistry 17/27 or 20/30 or equivalent. The course is designed for organic chemists who do not have an extensive math or physics background. In fact, no prior knowledge of NMR spectroscopy is assumed. It is suitable for both undergraduate and graduate students.

Chemistry 135. Experimental Synthetic Chemistry
Catalog Number: 3406
Ryan M. Spoering and Eugene Elliott Kwan
Half course (spring term). Three weeks of lectures M., 1:00 - 3:00 pm, then 10 hours of lab weekly Tu., W., Th., or Sa., 12-5 or 5-10 pm.
An introduction to experimental problems encountered in the synthesis, isolation, purification, characterization, and identification of inorganic and organic compounds. Student work on projects in chemical synthesis, encouraging technical proficiency and simulating actual research.

Note: Preference given to concentrators in Chemistry. Recommended as an efficient preparation for research in experimental inorganic and organic chemistry and related sciences such as biochemistry and pharmacology. Normally follows Chemistry 27 or 30 and is strongly recommended as preparation for Chemistry 98r and 99r.

Chemistry 145. Experimental Inorganic Chemistry - (New Course)
Catalog Number: 79903 Enrollment: Limited to 5.
Theodore A. Betley and Ryan M. Spoering
Half course (fall term). After three weeks of lectures, M., 1–3; then 10 hours of lab weekly, Tu., Th., 1–6. EXAM GROUP: 6, 7
An introduction to experimental problems encountered in the synthesis, isolation, purification, characterization, and identification of inorganic compounds, with an emphasis in air-free synthetic techniques and spectroscopic characterization methods specifically applicable to complexes containing transition metals.

Prerequisite: Chemistry 40 and one chemistry advanced lab course (100, 135, 165).

Chemistry 153. Organotransition Metal Chemistry
Catalog Number: 27616
Tobias Ritter
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17, 18
An introduction to transition metal-mediated chemistry. Topics include organometallic reaction mechanisms and transition metal catalysis in synthesis. Design, development, and presentation of research ideas, relevant to contemporary catalysis and the current literature will be taught as part of the course.
Note: Primarily for graduate students and advanced undergraduates in chemistry.  
Prerequisite: The course requires knowledge in synthetic organic chemistry (Chemistry 30 or equivalent).

[Chemistry 154 (formerly Chemistry 254). Advanced Inorganic Chemistry]  
Catalog Number: 32665  
Theodore A. Betley  
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8  
Transition element chemistry will be discussed with an emphasis on synthesis, structure, bonding, and reaction mechanisms. Connections between molecular structure and electronic structure and how that parlays into reactivity will be emphasized throughout. Advanced problems of interest to inorganic chemistry will be discussed in the context of catalysis, organometallics, and bioinorganic processes. The course will be discussion driven with a heavy reliance on the current literature.  
Note: Expected to be given in 2013–14.

Chemistry 156. Chemistry of Positron Emission Tomography  
Catalog Number: 14862  
Jacob M. Hooker (Medical School)  
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7  
This course will provide exposure to translational imaging from a unique chemical perspective. The focus of the course will be radiotracer chemistry but additional topics such as imaging physics, imaging equipment, and probe design based on biology, pharmacokinetics, and image analysis will be covered. Students will leave the course with working knowledge of radiotracer design and human translational imaging.  
Note: Laboratory sessions may be arranged.  
Prerequisite: One year of Organic Chemistry.

Chemistry 158. Nanoscience and Nanotechnology  
Catalog Number: 7504  
Charles M. Lieber  
Half course (spring term). M., W., 11:30–1. EXAM GROUP: 4, 5  
A survey of nanoscience and nanotechnology. Topics include: bottom-up versus top-down paradigms; synthesis and fabrication of zero-, one-and two-dimensional materials; physical properties of nanostructures, including electronic and optical properties; hierarchical organization in two and three dimensions; functional devices circuits and nanosystems; applications with emphasis on nano-bio interface and electronics.  
Note: For advanced undergraduate and graduate students.  
Prerequisite: Chemistry 40, or equivalent.

Chemistry 160. Quantum Chemistry  
Catalog Number: 3420  
Dmitrij Rappoport  
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14  
An introduction to the quantum theory of structure of matter and the tools of computational chemistry. The course topics include the principles of quantum mechanics, the electronic
structure of atoms and molecules, and the theory of atomic and molecular spectra. Methods of computational chemistry are introduced and applied throughout the course.

Prerequisite: Applied Mathematics 21a and 21b, Mathematics 21a and 21b, or equivalent preparation in calculus and differential equations; Physical Sciences 1 or equivalent preparation in chemical bonding and fundamental principles; Physical Sciences 2 or Physics 11a, and Physical Sciences 3 or Physics 11b.

Chemistry 161. Statistical Thermodynamics
Catalog Number: 3575
Xiaowei Zhuang
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
An introduction to statistical mechanics, thermodynamics, and chemical kinetics with applications to problems in chemistry and biology.
Prerequisite: Chemistry 160 or Physics 143a, or equivalent. Math 21a, or equivalent.

Chemistry 163. Frontiers in Biophysics
Catalog Number: 3635
Xiaoliang Sunney Xie
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
Emerging physical tools are changing the way biological problems are addressed. This interdisciplinary course will introduce new experimental advances, microscopy and spectroscopy in particular, together with underlying principles, in molecular and cellular biophysics.
Note: Primarily for advanced undergraduate students and graduate students with either biological or physical backgrounds.
Prerequisite: Chemistry 160, Chemistry 161, or permission of the instructor.

*Chemistry 165. Experimental Physical Chemistry
Catalog Number: 0667
Conor L. Evans (Medical School)
Half course (spring term). Tu., 3-4, and sections on Th., 1-5, or 6-10 pm. EXAM GROUP: 17
Hands-on introduction to physical methods and techniques used widely in chemistry and chemical physics research laboratories. Computer-based methods of data acquisition and analysis are used throughout.
Note: Recommended as an efficient preparation for research in experimental chemistry, chemical physics, engineering sciences, and related disciplines.
Prerequisite: Chemistry 7, or Physical Sciences 1, or equivalent; Applied Mathematics 21a or Mathematics 21a; one full course in physics or equivalent. Recommended: Chemistry 160, Physics 143a or similar, a course in Quantum Mechanics.

*Chemistry 170 (formerly *Chemistry 270). Chemical Biology
Catalog Number: 7754
Alan Saghatelian
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Applying chemical approaches to problems in biology. Topics include: protein engineering and directed evolution; RNA catalysis and gene regulation; chemical genetics, genomics, and proteomics; drug action and resistance; rational and combinatorial approaches to drug discovery;
metabolic engineering.

Prerequisite: A strong background in organic chemistry and biochemistry.

[Chemistry 171. Biological Synthesis]
Catalog Number: 49031
Emily Patricia Balskus
Half course (spring term). Hours to be arranged.
This course will examine synthesis from a biological perspective, focusing on how organisms construct and manipulate metabolites, as well as how biological catalysts and systems can be used for small molecule production. Topics to be covered include mechanistic enzymology, biosynthetic pathways and logic, biocatalysis, protein engineering, and synthetic biology.

Note: Expected to be given in 2013–14.

Chemistry 190. Statistical Mechanics in Chemistry and Biology
Catalog Number: 45125
Eugene I. Shakhnovich
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
This course will cover interdisciplinary aspects of Chemistry and Biology where Statistical Mechanics played a pivotal role. Topics include: Polymers in solution and condensed phases, equilibrium and dynamics of self-assembly -layers and micelles, protein folding, structure and bioinformatics, reaction dynamics on complex energy landscapes, dynamic and evolution of complex networks.

[*SCRB 185 (formerly *Chemistry 185). Human Disease]
Catalog Number: 4005
Gregory L. Verdine
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
This course will address both the molecular basis of human disease, and the biological and chemical foundation of therapeutic intervention. The course will include lectures by prominent experts, and analysis of the primary literature.

Note: Expected to be given in 2013–14. May not be taken concurrently with MCB 185. May not be taken for credit if MCB 185 or Chemistry 285 has already been taken. Credit cannot also be received for MCB 185.

Prerequisite: Chemistry 20/30 or 17/27, Life Sciences 52 or their equivalents.

Cross-listed Courses

Earth and Planetary Sciences 133. Atmospheric Chemistry
Earth and Planetary Sciences 187 (formerly EPS 137). Low Temperature Geochemistry II: Modern and ancient biogeochemical processes
MCB 176. Biochemistry of Membranes
[MCB 199. Statistical Thermodynamics and Quantitative Biology ]
[*SCRB 185 (formerly *Chemistry 185). Human Disease]
**Primarily for Graduates**

**[Chemistry 205. Advanced Physical Organic Chemistry]**
Catalog Number: 6636  
*Eric N. Jacobsen*  
*Half course (spring term). Hours to be arranged.*  
An in-depth perspective on mechanistic organic chemistry, with analysis of fundamental organic and organotransition metal reaction mechanisms, reactive intermediates, catalysis, stereochemistry, non-covalent interactions, and molecular recognition. Classical and modern tools of physical-organic chemistry, including reaction kinetics, computer modeling, isotope effects, and linear free-energy relationships will be evaluated in the context of literature case studies.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Chemistry 206 or an equivalent upper-level course in organic chemistry, and Chemistry 160/161 or an equivalent sequence in physical chemistry; or permission of the instructor.

**[Chemistry 207. Advanced Organic Synthesis and Reactions]**
Catalog Number: 86638  
*Matthew D. Shair*  
*Half course (fall term). Hours to be arranged.*  
This course presents reactivity principles of organic molecules. Topics include frontier molecular orbital theory, stereoelectronic effects, conformational analysis, cationic, anionic, radical, and carbene intermediates. These reactivity principles are used in a presentation of target-oriented synthesis. Strategies and tactics for assembling complex organic molecules are presented.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Undergraduates must take Chemistry 30 as a prerequisite.

**[*Chemistry 240. Statistical Thermodynamics]***
Catalog Number: 5215  
*Eugene I. Shakhnovich*  
*Half course (fall term). Hours to be arranged.*  
An introduction to statistical mechanics, thermodynamics, and chemical kinetics with strong emphasis on applications to problems in chemistry and biology. Topics include: thermodynamics and statistical properties of gases, liquids and crystals, critical phenomena, elements of non-equilibrium statistical mechanics with applications to Chemistry and Biophysics such as theories for biopolymers and chemical reactions.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Chemistry 160 and Chemistry 161, or permission of instructor.

**[*Chemistry 242. Quantum Mechanics for Physical Chemistry]***
Catalog Number: 2971  
*Hossein R. Sadeghpour*  
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*  
Review of the fundamental principles of quantum mechanics: Hilbert spaces, operator algebra, Schrodinger, Heisenberg and interaction pictures. Approximate methods of solution of the

Prerequisite: Chemistry 160 or Physics 143, Physics 11 or 12, and Applied Mathematics 105a and 105b, or Mathematics 21, or equivalent.

[*Chemistry 243. Applied Quantum Mechanics*]
Catalog Number: 3622
Hongkun Park
Half course (spring term). Hours to be arranged.
The course will cover the application of quantum mechanical principles to contemporary problems in chemistry and physics. The topics covered in the course will include: chemical bonding and the Born-Oppenheimer Approximation, atom/molecule-photon interaction (including second quantization and the dressed-state approach), Quantum Optics, and solid-state and nano-science (band theory, Fermi liquid theory, and electron transport).

Note: Expected to be given in 2013–14. Intended for graduate and advanced undergraduate students in chemistry, physics, and applied physics.

Prerequisite: Two semesters of quantum mechanics (Chemistry 160 / Chemistry 242, or Physics 143a / 143b, or equivalent).

[Chemistry 245. Classical, Quantum, and Semiclassical Dynamics and Scattering]
Catalog Number: 76413
Eric J. Heller
Half course (spring term). Hours to be arranged.
Topics taken from advanced classical mechanics which specifically tie into a better understanding of quantum mechanics, including quantum and semiclassical scattering theory, and quantum and semiclassical dynamics, semiclassical propagators, Feynman path intergral, chaos and quantum chaos, underpinnings of statistical mechanics, quantum tunneling and decoherence, semiclassical theory of spectroscopy, plus topics by agreement with the class.

Note: Expected to be given in 2013–14. Take Home exams.

Chemistry 253. Modeling Matter at Nanoscale: An Introduction to Theoretical and Computational Approaches - (New Course)
Catalog Number: 93647
Luis Alberto Montero Cabrera
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Essentials of modeling the structure of matter at the nanoscale. Material properties and connections to the meso-scale. Intended for advanced undergraduate students or beginning graduate students in Chemistry, Physics, Applied Physics and the Life Sciences.

Prerequisite: Applied Mathematics 21a and 21b; Mathematics 21a and 21b, or equivalent preparation in calculus and differential equations; Physical Sciences 1 or equivalent preparation in chemical bonding and fundamental principles; Physical Sciences 2 or Physics 11a, and Physical Sciences 3 or Physics 11b.
Chemistry 255. Practical Crystallography in Chemistry and Materials Science
Catalog Number: 79245 Enrollment: Limited to 10.
Shao-Liang Zheng
Half course (spring term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17
Due to great technical advances, crystal structure analysis plays an increasingly important role in the structure determination of complex solids. This course involves the basic principles of crystallography and covers advanced aspects of practical crystal structure refinement. Topics include crystal symmetry, space groups, geometry of diffraction, structure factors, and structure refinement. Students will gain a working knowledge of x-ray crystallographic techniques, including how to: grow quality crystals, collect data, reduce data, determine a structure, visualize structure, utilize structural databases, publish crystallographic results.
Prerequisite: Chemistry 40 or equivalent.

[Chemistry 267. Surface and Interfacial Phenomena]
Catalog Number: 0571
Cynthia M. Friend
Half course (spring term). Hours to be arranged.
General principles governing surface and interfacial phenomena are developed using treatment of surface electronic and geometric structure as a foundation. The course will treat both theoretical and experimental tools for the investigation of surface structure. Selected spectroscopic techniques will also be treated, with emphasis on surface phenomena. The latter part of the course will develop principles of absorption, reaction, and growth phenomena illustrated through current literature topics.
Note: Expected to be given in 2013–14. Recommended for graduate and advanced undergraduate students in Chemistry, Applied Physics, and related areas with interest in Materials Chemistry and Engineering, Surface Chemistry, Applied Physics, and other areas dependent on properties and behavior of interfaces.
Prerequisite: Chemistry 160 and 161 or equivalent; Applied Mathematics 21a or Mathematics 21a; one full course in physics or equivalent.

Cross-listed Courses

Applied Physics 235. Chemistry in Materials Science and Engineering
Applied Physics 291. Electron Microscopy Laboratory
Biophysics 242r. Special Topics in Biophysics
Engineering Sciences 228. Biomaterials
[Engineering Sciences 268. Chemical Kinetics]
Systems Biology 204. Biomolecular Engineering and Synthetic Biology

Graduate Courses of Reading and Research

A student intending to elect one of the following research courses should consult the instructor as far in advance as possible.

*Chemistry 300. Research and Reading
Individual work under the supervision of members of the Department.

*Chemistry 301hf. Scientific Teaching and Communications: Practicum
Catalog Number: 9903
Gregory C. Tucci 5020, Matthew D. Shair 2280, and Ryan M. Spoering 5625
Half course (throughout the year). Tu., 4–6.
This course will teach graduate students how to communicate scientific concepts in the classroom. Students will focus on becoming effective teachers in discussion sections and in the laboratory. The course will emphasize hands-on experience in teaching and explaining scientific concepts.
Note: Required of all first-year graduate students in the Department of Chemistry and Chemical Biology.

*Chemistry 302. Organometallic Chemistry
Catalog Number: 1413
Eric N. Jacobsen 1040

*Chemistry 303. Organic Chemistry
Catalog Number: 1043
David A. Evans 7774

*Chemistry 304. Theoretical Atomic, Molecular, and Chemical Physics
Catalog Number: 0532
Eric J. Heller 1074 (on leave fall term)

*Chemistry 305qc. Responsible Conduct of Research (RCR) - (New Course)
Catalog Number: 63731
Alan Saghatelian
Quarter course (spring term). Th., Fr., Tu., Wd., 8:30–12:30.
Chemistry 305qc uses case studies to examine basic ethical and regulatory requirements for conducting research, and fulfills the National Science Foundation (NSF) and National Institutes of Health (NIH) requirements for formal Responsible Conduct of Research (RCR) instruction. Topics covered include: research and professional conduct; responsible authorship and publication; mentor-mentee relationships; conflicts of interest; peer review; grant writing and budgeting; intellectual property; data acquisition and management; ownership of data and biological samples; and research involving human and animal subjects. Students are required to attend all lectures, participate in class discussions, and complete written homework case study assignments. A certificate will be issued upon successful completion of course.
Note: This course begins on Thursday, January 17, 2013 and runs through Wednesday, January 23, 2013. To register, please click [here](#). The syllabus is also available.

*Chemistry 311. Physical Chemistry
Catalog Number: 2640
Charles M. Lieber 3102
*Chemistry 315. Photochemistry and Kinetics  
Catalog Number: 5964  
James G. Anderson 6057

*Chemistry 318. Organic Chemistry  
Catalog Number: 4295  
George M. Whitesides 7447

*Chemistry 320. Chemical Biology  
Catalog Number: 64138  
Emily Patricia Balskus 6962

*Chemistry 323. Organic Chemistry  
Catalog Number: 2477  
Stuart L. Schreiber 2166

*Chemistry 325. Physical Chemistry  
Catalog Number: 8530  
Cynthia M. Friend 7446

*Chemistry 330. Physical Chemistry  
Catalog Number: 1454  
Adam E. Cohen 5761

*Chemistry 331. Approaches Toward Understanding and Treating Human Disease  
Catalog Number: 1408  
Gregory L. Verdine 1980

*Chemistry 336. Physical and Inorganic Chemistry and Materials Science  
Catalog Number: 5266  
Roy G. Gordon 1353

*Chemistry 340. Inorganic Chemistry  
Catalog Number: 7987  
Theodore A. Betley 5760

*Chemistry 342. Inorganic Chemistry  
Catalog Number: 58419  
Daniel Nocera 7071

*Chemistry 350. Theoretical Physical Chemistry  
Catalog Number: 8285  
Eugene I. Shakhnovich 3147
*Chemistry 386. Theoretical Chemistry
Catalog Number: 5300
Alán Aspuru-Guzik 5539

*Chemistry 387. Organic Chemistry
Catalog Number: 4674
Matthew D. Shair 2280

*Chemistry 388. Organic Chemistry
Catalog Number: 1979
Andrew G. Myers 8278

*Chemistry 389. Physical Chemistry
Catalog Number: 5111
Xiaoliang Sunney Xie 2290

*Chemistry 390. Organic Chemistry and Chemical Biology
Catalog Number: 7469
David R. Liu 2717

*Chemistry 391. Physical Chemistry
Catalog Number: 9897
Hongkun Park 2485

*Chemistry 393. Physical Chemistry
Catalog Number: 1273
Xiaowei Zhuang 3991

*Chemistry 396. Organic Chemistry
Catalog Number: 2293
Daniel E. Kahne 5065

*Chemistry 397. Organic Chemistry
Catalog Number: 3972
Suzanne Walker (Medical School) 5087

*Chemistry 398. Organic and Organometallic Chemistry
Catalog Number: 1013
Tobias Ritter 5540

*Chemistry 399. Biochemistry and Chemical Biology
Catalog Number: 4050
Alan Saghatelian 5541
The Classics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of the Classics

Mark Schiefsky, Professor of the Classics (Chair)
Timothy Gordon Barnes, Lecturer on the Classics
Kathleen M. Coleman, James Loeb Professor of the Classics (Director of Undergraduate Studies)
Emma Dench, Professor of the Classics and of History, Harvard College Professor (Director of Graduate Studies)
John Duffy, Dumbarton Oaks Professor of Byzantine Philology and Literature, Dumbarton Oaks Professor of Byzantine Philology and Literature, Emeritus (on leave fall term)
David F. Elmer, Associate Professor of the Classics (on leave 2012-13)
Jan Felix Gaertner, Lecturer on the Classics
Albert Henrichs, Eliot Professor of Greek Literature (on leave spring term)
Sarah Elizabeth Insley, College Fellow in the Department of the Classics
Paul Joseph Kosmin, Assistant Professor of the Classics
Ivy Livingston, Preceptor in the Classics
Gregory Nagy, Francis Jones Professor of Classical Greek Literature and Professor of Comparative Literature
Vassiliki Rapti, Preceptor in Modern Greek
Jeremy Rau, Professor of Linguistics and of the Classics (on leave 2012-13)
Panagiotis Roilos, George Seferis Professor of Modern Greek Studies and of Comparative Literature
Adrian Staehli, Professor of Classical Archaeology
Justin Anthony Stover, College Fellow in the Department of the Classics
R. J. Tarrant, Pope Professor of the Latin Language and Literature
Richard F. Thomas, George Martin Lane Professor of the Classics, Harvard College Professor
Andreas Thomas Zanker, Lecturer on the Classics
Jan Ziolkowski, Arthur Kingsley Porter Professor of Medieval Latin

Other Faculty Offering Instruction in the Department of the Classics

Shaye J.D. Cohen, Nathan Littauer Professor of Hebrew Literature and Philosophy (on leave spring term)
Charles Donahue, Jr., Paul A. Freund Professor of Law (Law School)
Susanne Ebbinghaus, George M.A. Hanfmann Curator of Ancient Art
James Hankins, Professor of History
Christopher P. Jones, George Martin Lane Professor of the Classics and of History, Emeritus
Gisela Striker, Walter C. Klein Professor of Philosophy and of the Classics, Emerita

Affiliates of the Department of the Classics

Ruth Bielfeldt, Assistant Professor of History of Art and Architecture
Leah Jane Whittington, Assistant Professor of English

Information about requirements for undergraduate and graduate degrees, honors, prizes, and scholarships may be obtained at the office of the Department, Boylston Hall 204. Graduate students in the Faculty of Arts and Sciences may enroll in certain foreign language courses for the grade of Satisfactory/Unsatisfactory. Students should consult with course heads or the department’s website (www.fas.harvard.edu/~classics) to determine if a course is offered on that basis.

Classical Archaeology

Primarily for Undergraduates

Cross-listed Courses

[History of Art and Architecture 13x. Introduction to Greek and Roman Sculpture]

For Undergraduates and Graduates

Classical Archaeology 100. Greek Antiquity
Catalog Number: 3132
Adrian Staehli
The course provides a broad overview of the development of Greek art, architecture, and material culture from the end of the "Dark Ages" through the Archaic and Classical periods to the Hellenistic age. It offers basic knowledge about core categories of archaeological artifacts and remains within their topographical setting and the context of Greek culture and society, and includes issues of archaeological method and problems of current research.

Classical Archaeology 101. Roman Antiquity - (New Course)
Catalog Number: 50105
Adrian Staehli
Half course (fall term). Hours to be arranged.
Note: Expected to be given in 2013–14.

Classical Archaeology 158. Ancient Sculpture: Display, Perception, and Context - (New Course)
Catalog Number: 13817
Adrian Staehli
2012-2013 Previous Courses of Instruction

Statues in marble and bronze count among the most prominent objects of art to have survived from Greek and Roman antiquity. Since the first discoveries of ancient sculpture in the Renaissance, they not only influenced contemporary art enormously, but they also shaped our understanding of Classical (mainly Greek) art. This course explores the development of different sculptural styles, examines the display of statues and how they addressed their beholders, and introduces basic concepts of analyzing and interpreting ancient sculpture.

**Classical Archaeology 159. Collecting the Past: Seminar - (New Course)**
Catalog Number: 66455
Adrian Staehli
We will explore different historical practices of collecting and displaying Greek and Roman art from antiquity through the middle ages to most recent times, including the current debates about cultural propriety and the repatriation of looted antiquities, and investigate how various forms of collecting shape the knowledge of ancient civilizations and, more generally, of the past.

**Cross-listed Courses**

[History of Art and Architecture 132e. The Ideal of the Everyday in Greek Art]
[History of Art and Architecture 137p. The Roman Dinner Party: Proseminar]

**Primarily for Graduates**

**Classical Archaeology 250. Caesar’s Salad: Roman Art During the Decline of the Roman Republic and At the Dawn of a New Empire: Seminar**
Catalog Number: 85827
Adrian Staehli and Ruth Bielfeldt
Half course (fall term). Th., 3–5.
In the Late Republic, Rome becomes an arena of social and political strife. This seminar explores the radical transformation of Rome’s cityscape in this crucial period of Roman history: elite patronage and munificence, war commemoration and the Roman triumph, modes of aristocratic self-display in portraiture and coinage, *otium*-culture and leisure-lifestyles.

**Cross-listed Courses**

**History of Art and Architecture 139j. Greek Myths on Roman Sarcophagi**

**Classical Studies (Courses in Translation)**

**Primarily for Undergraduates**

*Classical Studies 97a. Greek Culture and Civilization*
Catalog Number: 3965
Paul Joseph Kosmin
Half course (fall term). M., W., at 1, and a weekly section to be arranged. EXAM GROUP: 6
This course will cover the history of ancient Greece from the Bronze Age Minoan and Mycenaean palace civilizations to the Roman conquest of the East Mediterranean. Attention will be paid to the major political, social, economic, and cultural transformations. Students will explore the wide variety of textual sources (in translation) and archaeological evidence out of which historians seek to understand ancient Greece.

**Classical Studies 97b (formerly *Classics 97b). Roman Culture and Civilization**

Catalog Number: 4090

Kathleen M. Coleman

*Half course (spring term). M., W., F., at 1. EXAM GROUP: 6*

This course has three components: a chronological survey of Roman history from the beginnings to Constantine; exploration of key features of Roman culture (e.g., economy, education, housing, slavery); and an introduction to the tools and methods available for research on ancient Rome. Students are taught how to work with the Roman collections at Harvard (brick-stamps, coins, manuscripts, maps, papyri, pottery, sculpture, etc.). Each student receives guidance in the planning and execution of a research paper.

**Note:** Concentrators are required to take either one or two semesters of Classical Studies 97, depending on their concentration track.

**Cross-listed Courses**

- **Aesthetic and Interpretive Understanding 21 (formerly Literature and Arts A-51). Virgil: Poetry and Reception**
- **Culture and Belief 17 (formerly Historical Studies B-06). Institutional Violence and Public Spectacle: The Case of the Roman Games**
- **Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization**
- **Culture and Belief 35. Classical Mythology**
- [*Freshman Seminar 38n. Dead and Loving It?: The Cult of the Saints in the Late Antique and Medieval Eastern Mediterranean*]
- [*History 80a. Roman Imperialism*]
- [*History 80g. Travelers to Byzantium - (New Course)*]
- [History of Art and Architecture 13x. Introduction to Greek and Roman Sculpture]
- **Philosophy 7. Introduction to Ancient Philosophy**

**For Undergraduates and Graduates**

- **Classical Studies 135. To the Ends of the Earth: Geography, Ethnography, and Exploration in the Ancient World - (New Course)**

Catalog Number: 28924

Paul Joseph Kosmin

*Half course (spring term). M., W., at 12.*

This course will investigate how ancient populations conceptualized the world in which they lived and the foreign peoples who inhabited it. We will explore the interactions of geography and exploration with myth, trade, philosophy, empire, and historiography.
**Classical Studies 150. Ovid’s *Metamorphoses* and its Reception - *(New Course)***

Catalog Number: 22723  
*R. J. Tarrant*  
*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*

Ovid’s witty and exuberant epic of change encompasses the history of the world from creation to the apotheosis of Julius Caesar. No other work of classical literature has had a larger impact on western culture from the Middle Ages to the present. This course will begin with a reading of the poem and will then explore aspects of its influence on literature, the visual arts and music. All readings in English translation.

**Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe - *(New Course)***

Catalog Number: 92975  
*Sarah Elizabeth Insley and Justin Anthony Stover*  
*Half course (fall term). M., W., at 11, and a possible weekly section, to be arranged. EXAM GROUP: 4*

Introduces students to cultural interaction between East and West from the age of Constantine up to the Fourth Crusade. Material will be taught in translation, combining primary source texts and significant secondary scholarship in both Medieval Latin and Byzantine Studies, in order to explore the close inter-relationship between the Byzantine Eastern Mediterranean and Medieval Europe. Topics to be covered include changing ideals of imperial rule in East and West in Late Antiquity; Byzantine and Western responses to Islam; literary renaissance (Carolingian, Macedonian) in the early Middle Ages; iconoclasm(s); encyclopedism and scholasticism; the beginnings of secular literature in East and West; and literary accounts of travel and mobility between Europe and the Mediterranean.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**Classical Studies 165. Medicine in the Greco-Roman World**

Catalog Number: 2851  
*Mark Schiefsky*  
*Half course (fall term). Tu., Th., at 12; . EXAM GROUP: 14*

Theories and practices of health and healing in the ancient Greco-Roman world, with special emphasis on the relationship of learned medicine to philosophy and other healing traditions.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Cross-listed Courses**

**History 1011. The World of the Roman Empire**  
[History 1012. Identity in Classical Antiquity]
History 1035. Byzantine Civilization - (New Course)
[History 1300. Western Intellectual History: Greco-Roman Antiquity]
[History of Art and Architecture 132e. The Ideal of the Everyday in Greek Art]
[History of Art and Architecture 137p. The Roman Dinner Party: Proseminar]
[History of Science 106. History of Ancient Science]
[Jewish Studies 136. Jews and Greeks, Judaism and Hellenism]
[History of Art and Architecture 132e. The Ideal of the Everyday in Greek Art]
[History of Art and Architecture 137p. The Roman Dinner Party: Proseminar]

*Primarily for Graduates

Cross-listed Courses

[Comparative Literature 266. Irony]
[Comparative Literature 288. The Ancients and the Moderns: Modern Critical Theory and the Classics]

History of Art and Architecture 139j. Greek Myths on Roman Sarcophagi

*History of Science 206r. Physical Atomism in Antiquity: Epicurus and Lucretius: Seminar

Classical Philology

For Undergraduates and Graduates

Cross-listed Courses

[Literature 152. Epic and Opera]
[Comparative Literature 288. The Ancients and the Moderns: Modern Critical Theory and the Classics]

*Literature 187r (formerly *Literature 187). Selected Topics in Poetics and Rhetoric: Seminar

Primarily for Graduates

Classical Philology 218. Dionysos: Texts and Images - (New Course)
Catalog Number: 52937
Albert Henrichs

Half course (fall term). W., 1–3.
This seminar will explore the complex dynamics between textual and visual representations of central Dionysiac themes from myth and ritual such as the wine god and his circle, maenadism, afterlife, and Dionysiac festivals. Due attention will be paid to relevant methodologies, including current versions of the 19th-century "Bild und Lied" theory. Key texts are the Homer's Hymn to Dionysos, Euripides’ Bacchae, prose accounts of Dionysos, and Nonnos’ Dionysiaka. The
images will be largely taken from vase painting, wall painting, sculpture, and metal work. The chronological range is ca. 600 BCE to 500 CE.

**Classical Philology 219. Latin Epigraphy - (New Course)**
Catalog Number: 78532 Enrollment: May be taken for undergraduate credit as Latin 129.
*Kathleen M. Coleman*

_Half course (fall term). M., W., at 12, F., 12–2. EXAM GROUP: 5, 6_

An introduction to the study of Latin inscriptions from across the Empire in all media, chiefly stone, but also clay, glass, metal, mosaic, plaster, and wood. Texts to be studied range from official documents (senatorial decrees, colonial charters, market-timetables) to personal records (epitaphs, “lost and found” notices, amatory graffiti), from the late Republic to the early Christian period. Students learn how to transcribe, supplement, and translate these texts, and interpret them within their social and cultural context.

*Note:* May be taken for undergraduate credit as [Latin 129, Latin Epigraphy](#).

**Classical Philology 226. Memories of the Roman Republic**
Catalog Number: 68621
*Emma Dench*

_Half course (spring term). Th., 1–3._

An exploration of the ways in which the Roman Republican past was constructed both in antiquity and in modern historiography, with particular attention to narrative tendencies, turning points, individuals, and political shapes.

**Classical Philology 263 (formerly Classics 263). Homer**
Catalog Number: 8655
*Gregory Nagy*

_Half course (spring term). Tu., 1–3._

A survey of the mechanics as well as the esthetics of Homeric poetry. Critical reassessments of the textual tradition, the reception, and the oral traditional poetic background. Close scrutiny of selected passages.

**Classical Philology 282. Lucretius - (New Course)**
Catalog Number: 39285
*Andreas Thomas Zanker*

_Half course (fall term). Th., 1–3._

A reading of the _De Rerum Natura_ covering poetic style, the question of genre, textual criticism, Epicureanism, and the reception of the poem in the modern world.

**Classical Philology 294. Ancient Latin Scholarship - (New Course)**
Catalog Number: 99713
*Justin Anthony Stover*

_Half course (spring term). M., 1–3._

This seminar will explore in detail the vast and varied corpus of ancient scholarship on Latin literary texts, from the first century to the Carolingian Renaissance. Emphases will include the history of Latin education, the editing of scholia, and the transmission of scholarship.
Prerequisite: Students must be able to read substantial amounts of primary material in Latin (and some in Greek), as well as secondary scholarship in various modern languages.

Courses of Reading and Research

Primarily for Undergraduates

*Classics 93r. Advanced Tutorial for Credit
Catalog Number: 0511
Kathleen M. Coleman
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial instruction for course credit open to candidates for honors who are qualified to do special reading projects in Greek and/or Latin.
Note: May be counted for concentration.

Classics 98. Tutorial - Junior Year
Catalog Number: 31083
Kathleen M. Coleman and assistants
Half course (fall term; repeated spring term). Section I: Tu., 3–5; Section II, W., 1–3.
Close study of a topic in Greco-Roman civilization and/or literature, culminating in the preparation of a substantial research paper (ca. 20 pages).
Note: Required of all concentrators in the junior year.

*Classics 99. Tutorial — Senior Year
Catalog Number: 2350
Kathleen M. Coleman and assistants
Full course. Hours to be arranged.
Tutorial instruction for course credit (in addition to ordinary tutorial instruction) is open only to candidates for honors writing a thesis in their senior year whose applications for such instruction have been approved by the Director of Undergraduate Studies.
Note: May be counted for concentration. Divisible only with permission of the Director of Undergraduate Studies.

Primarily for Graduates

*Classics 300. Direction of Doctoral Dissertations
Catalog Number: 4543
Kathleen M. Coleman 2289, Emma Dench 5243, John Duffy 1352 (on leave fall term), Susanne Ebbinghaus 5184, David F. Elmer 5574 (on leave 2012-13), Albert Henrichs 4085 (on leave spring term), Christopher P. Jones 3204, Paul Joseph Kosmin 6927, Gregory Nagy 1423, Jeremy Rau 4657 (on leave 2012-13), Panagiotis Roilos 1982, Mark Schiefsky 2354, Adrian Staehli 6796, R. J. Tarrant 7503, Richard F. Thomas 1630, and Jan Ziolkowski 7275

*Classics 301. Reading or Topics Course
Catalog Number: 3457
Kathleen M. Coleman 2289, Emma Dench 5243, John Duffy 1352 (on leave fall term), David F.
Elmer 5574 (on leave 2012-13), Albert Henrichs 4085 (on leave spring term), Sarah Elizabeth Insley 1231, Christopher P. Jones 3204, Paul Joseph Kosmin 6927, Gregory Nagy 1423, Jeremy Rau 4657 (on leave 2012-13), Panagiotis Roiilos 1982, Mark Schiefsky 2354, Adrian Staehli 6796, Gisela Striker 2271, R. J. Tarrant 7503, Richard F. Thomas 1630, Andreas Thomas Zanker 6743, and Jan Ziolkowski 7275

Note: For graduate students whose individual needs are not met by the formal courses offered.

*Classics 302. Special Examinations Direction
Catalog Number: 2686
Ruth Bielfeldt 5682, Shaye J.D. Cohen 4180 (on leave spring term), Kathleen M. Coleman 2289, Emma Dench 5243, Charles Donahue, Jr. (Law School) 2650, John Duffy 1352 (on leave fall term), Susanne Ebbinghaus 5184, David F. Elmer 5574 (on leave 2012-13), James Hankins 1239, Albert Henrichs 4085 (on leave spring term), Paul Joseph Kosmin 6927, Gregory Nagy 1423, Jeremy Rau 4657 (on leave 2012-13), Panagiotis Roiilos 1982, Mark Schiefsky 2354, Adrian Staehli 6796, Gisela Striker 2271, R. J. Tarrant 7503, Richard F. Thomas 1630, and Jan Ziolkowski 7275

*Classics 350. Classics Proseminar
Catalog Number: 4026
Emma Dench 5243
Designed to introduce graduate students in the Department of the Classics to the essential fields, tools, and methodologies of the discipline.

Note: For first-year students working toward the PhD in the Department of the Classics. Open to other students by permission of instructor.

*Classics 360. Teaching Colloquium - (New Course)
Catalog Number: 88102
Ivy Livingston
A practicum course in the craft of teaching. Topics include designing syllabi and assessments, responding to student writing, and guiding classroom discussion. Strategies will be applicable to courses working entirely in English as well as to those in the languages.

Note: This course must be taken SAT/UNSAT. Not repeatable for credit. No auditors.

Greek

Students who have studied classical Greek previously should register at the FAS Exams Office (Office of the Registrar, 20 Garden Street) to take the Harvard placement test in Greek during Freshman Week. Further information on placement in Greek and on the language requirement is available from the Language Preceptor (Boylston Hall 225).

Primarily for Undergraduates

Greek Aa (formerly Greek A). Beginning Greek
Catalog Number: 0129
Ivy Livingston and assistant

**Greek Aab, Beginning Greek (Intensive)**
Catalog Number: 0714
Ivy Livingston and assistants

*Half course (spring term).* M. through F., at 9, and a weekly, one-hour, mandatory session to be arranged. EXAM GROUP: 2, 11

For students with little or no previous instruction in Greek who are seriously interested in making very rapid progress. All basic grammar of the normal first-year sequence (Greek Aa and Ab) and practice in reading prose. Students are prepared for Greek Ba or Bb.

*Note:* No auditors. May be taken pass/fail. Students with more than one year of formal instruction should take the Harvard placement test in Greek during Freshman Week and consult with the Course Head before enrolling.

**Greek Ab (formerly Greek B). Beginning Greek**
Catalog Number: 0457
Ivy Livingston and assistant

*Half course (spring term).* M., W., Th., F., at 9. EXAM GROUP: 2, 11

Continuation of Greek Aa. Completion of basic grammar and reading of longer passages.

*Note:* No auditors. May be taken pass/fail.

**Prerequisite:** Greek Aa or equivalent.

**Greek Ac, Review and Reading**
Catalog Number: 8283
Ivy Livingston and assistant

*Half course (fall term).* M., W., Th., F., at 10. EXAM GROUP: 3, 12

For students with more than one year of formal training in Greek who do not place into Greek Ba. The course will combine a review of morphology and syntax with readings from prose authors. Students are prepared for Greek Bb or Ba.

*Note:* No auditors. May be taken Pass/Fail.

**Greek Ba (formerly Greek 3). Introduction to Attic Prose**
Catalog Number: 4696
Ivy Livingston and assistant

*Half course (fall term).* M., W., F., at 12. EXAM GROUP: 5

A bridge between the study of Greek grammar and the reading of prose authors; intended to develop reading and translation skills and introduce prose styles.

**Prerequisite:** Greek Ab, Aab, Ac, or equivalent.
Greek Bb (formerly Greek 4). Selections from Homer’s *Iliad*
Catalog Number: 3361
*Ivy Livingston and assistant*
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
An introduction to Homeric poetry: language, meter, formulae, and type scenes.
*Prerequisite:* Greek Ab, Aab, Ac, or equivalent.

For Undergraduates and Graduates

Greek H. Introductory Greek Prose Composition
Catalog Number: 6323
*Ivy Livingston and assistant*
Half course (fall term). M., W., F., at 9. EXAM GROUP: 5
Practice in the translation of sentences and connected prose passages into Attic Greek; review of forms and syntax; readings of selections from prose authors.
*Prerequisite:* Greek Ba or equivalent.

Greek K. Advanced Greek Prose Composition
Catalog Number: 4171
*Timothy Gordon Barnes and assistant*
Half course (spring term). W., 1–3.
Composition in the prose style of various authors and genres, with selected readings representing the development of Greek prose and its analysis by scholars, ancient and modern.
*Prerequisite:* Greek H or equivalent.

Greek 102. Attic Orators
Catalog Number: 3103
*Timothy Gordon Barnes*
Half course (fall term). Tu., Th., at 12. EXAM GROUP: 14
Athenian speeches honoring the city’s fallen warriors, read against their historical and cultural background, with emphasis on Attic syntax and on the conventions of encomiastic prose style. The selection includes the *logoi epitaphioi* ascribed to Lysias, Demosthenes and Hypereides, as well as Perikles’ funeral oration as reported by Thukydides.

Greek 110r. Plato
Catalog Number: 6229
*Mark Schiefsky*
Half course (spring term). Tu., Th., at 12. EXAM GROUP: 14
Reading of one or more dialogues in Greek, with attention to both literary form and philosophical content.

Greek 112a. History of Greek Literature I
Catalog Number: 3052
*Gregory Nagy and assistant*
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4
A survey of early Greek poetry and prose, with readings from Homer, Hesiod, the Homeric
Hymns, lyric poetry, and Herodotus. Discussions of genre in relation to performance, historical contexts, thematic (dis)continuities, oral tradition.

[**Greek 112b. History of Greek Literature II**]
Catalog Number: 6889
_Instructor to be determined, and assistant_
_Half course (spring term). Hours to be arranged._
A survey of Greek literature of the Classical and Hellenistic periods. Reading of extended selections from Attic drama, historiography, philosophical writers, and Hellenistic poets, with discussion of social context, literary history, and interpretive issues.
*Note:* Expected to be given in 2013–14.

**Greek 120. Homer - (New Course)**
Catalog Number: 20682
Andreas Thomas Zanker
_Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13_
A reading of books from the _Iliad_ and the _Odyssey_. Emphasis will be placed on diction, literary technique, oral composition, Homeric ethics, and the differences between the two poems and their heroes.

**Greek 127. Xenophon’s Two Cyri - (New Course)**
Catalog Number: 95553
Paul Joseph Kosmin
_Half course (spring term). M., W., at 2._
We will read, in Greek, selections from Xenophon’s _Anabasis_ and _Cyropaedia_, examined as both literary texts and historical sources. The first work recounts Xenophon’s own participation in the famous expedition of the Ten Thousand into the heart of the Persian Empire in support of the rebel prince Cyrus the Younger, and the troops’ difficult homeward journey. The second work is a fictional biography of Cyrus the Great, founder of the Persian Empire.

**Greek 134. The Language of Homer**
Catalog Number: 5139
Jeremy Rau
_Half course (fall term). Hours to be arranged._
Essentials of Greek comparative and historical grammar, and a close reading of _Iliad_ 1 and 3. Diachronic aspects of Homeric grammar and diction.
*Note:* Expected to be given in 2013–14.

**Cross-listed Courses**

[**Literature 162 (formerly *Comparative Literature 207). Theory and Methods in Comparative Oral Traditions: Seminar**]
*Literature 187r (formerly *Literature 187). Selected Topics in Poetics and Rhetoric: Seminar*

*Primarily for Graduates*
*Greek 201. Reading Greek
Catalog Number: 1968
Albert Henrichs
Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13
Readings of Greek prose and poetry ranging from archaic to imperial, with emphasis on quick comprehension of syntactic, stylistic, and generic features.
Note: Intended for graduate students in Classical Philology as preparation for the general examinations. Texts to be selected from the reading list by participants.

Cross-listed Courses

*Philosophy 322. Philosophy in Translation: Greek

Latin

Students who have studied Latin previously and have not taken the Advanced placement test or SAT II should contact the FAS Exams Office (Office of the Registrar, 20 Garden Street) to take the Harvard placement test during Freshman Week. No one who has studied one year or more of Latin will be admitted to Latin Aa without taking the placement test. Further information on placement in Latin and the language requirement is available from the Language Preceptor (Boylston Hall 225), or the Freshman Dean’s Office.

Primarily for Undergraduates

Latin Aa (formerly Latin A). Beginning Latin
Catalog Number: 4759
Ivy Livingston and assistants
Half course (fall term). Sections I and II: M., W., Th., F., at 9; Section III: M., W., Th., F., at 10. EXAM GROUP: 2, 11
For students with very little or no previous instruction in Latin. Introduction to Latin grammar and reading of sentences and short passages.
Note: No auditors. May be taken pass/fail. Students with more than one year of formal instruction should take the Harvard placement test in Latin during Freshman Week and consult with the Course Head before enrolling.

Latin Aab. Beginning Latin (Intensive)
Catalog Number: 7111
Ivy Livingston and assistants
Full course (fall term). M. through F., at 9, and a weekly, one-hour, mandatory session to be arranged. EXAM GROUP: 2, 11
For students with little or no previous instruction in Latin who are seriously interested in making very rapid progress. All basic grammar of the normal first-year sequence (Latin Aa and Ab) and practice in reading prose. Students are prepared for Latin Ba, Bb, Bam, or Bbm.
Note: No auditors. May be taken pass/fail. Students with more than one year of formal instruction should take the Harvard placement test in Latin during Freshman Week and consult with the Course Head before enrolling. This course will only be offered in the fall term.
**Latin Ab (formerly Latin B), Beginning Latin**  
Catalog Number: 2101  
Ivy Livingston and assistants  
*Half course (spring term). Section I: M., W., Th., F., at 9; Section II: M., W., Th., F., at 10.*  
**EXAM GROUP: 2, 11**  
Continuation of Latin Aa. Completion of basic grammar and reading of longer passages.  
*Note:* No auditors. May be taken Pass/Fail.  
**Prerequisite:** Latin Aa or equivalent.

**Latin Ac, Review and Reading**  
Catalog Number: 7033  
Ivy Livingston and assistant  
*Half course (fall term). M., W., Th., F., at 9. EXAM GROUP: 2, 11*  
For students with more than one year of formal training in Latin who do not place into Latin Ba. The course will combine a review of morphology and syntax with readings from prose authors. Students are prepared for Latin Ba or Bb.  
*Note:* No auditors. May be taken Pass/Fail.

**Latin Ba (formerly Latin 3), Latin Prose Selections (Classical)**  
Catalog Number: 2344  
Ivy Livingston and assistant  
*Half course (fall term). M., W., F., at 10. EXAM GROUP: 3*  
A bridge between the study of Latin grammar and the reading of prose authors; intended to develop reading and translation skills and introduce prose styles. The readings are short selections from a variety of genres by authors such as Cicero, Pliny, Nepos, Sallust, and Petronius.  
**Prerequisite:** Latin Ab, Aab, Ac, or equivalent.

**Latin Bam (formerly Latin 3m), Latin Prose Selections (Late Antique and Medieval)**  
Catalog Number: 7123  
Jan Ziolkowski and assistant  
*Half course (fall term). M., W., F., at 10. EXAM GROUP: 3*  
Provides a bridge between study of grammar and reading of prose. After review of fundamentals, studies short selections of post-classical texts and authors such as Vulgate Bible, Augustine, Anselm of Canterbury, Abelard, and Dante.  
**Prerequisite:** Latin Ab, Aab, Ac, or equivalent.

**Latin Bb (formerly Latin 4), Introduction to Latin Poetry (Classical)**  
Catalog Number: 2488  
Ivy Livingston and assistant  
*Half course (spring term). M., W., F., at 9. EXAM GROUP: 2*  
Reading of selections of Latin poetry and introduction to meter.  
**Prerequisite:** Latin Ab, Aab, Ac, or equivalent.

**Latin Bbm (formerly Latin 4m), Introduction to Latin Poetry (Late Antique and Medieval)**  
Catalog Number: 2096
Jan Ziolkowski and assistant
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3
Reading of selections of Medieval Latin poetry and introduction to quantitative meter and rhythmical poetry. Aims to facilitate the reading through study of short selections of post-classical poetry from authors such as Ambrose, Alcuin, Hrotsvit of Gandersheim, and Aquinas. Prerequisite: Latin Ab, Aab, Ac, or equivalent.

For Undergraduates and Graduates

Latin H. Introductory Latin Prose Composition
Catalog Number: 3814
Ivy Livingston and assistant
Half course (spring term). M., W., F., at 9. EXAM GROUP: 2
Practice in the translation of sentences and connected prose passages from English into Latin, with review of Latin syntax. Prerequisite: Latin Ba or equivalent.

Latin K. Advanced Latin Prose Composition: Seminar
Catalog Number: 5018
Richard F. Thomas
Half course (spring term). Hours to be arranged.
Exercise in the prose style of different authors and periods, working within various subject areas and genres. As a guide to composition, we will read and analyze illustrative passages from major authors, including Cato, Cicero, Sallust, Livy, Seneca, and Tacitus, as well as some distinctive styles in lesser-known authors. Note: Expected to be given in 2013–14.

Latin 103. Latin Elegy
Catalog Number: 5435
R. J. Tarrant
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4
Selections from Propertius, Tibullus, and Ovid’s Amores.

Latin 106b. Virgil: Aeneid
Catalog Number: 7069
Richard F. Thomas and assistant
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Reading and discussion of Virgil’s Aeneid, with attention to its place in the epic tradition and its status as a work of Augustan literature. Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Latin 112a. History of Latin Literature I
Catalog Number: 7099
R. J. Tarrant and assistant
Half course (fall term). M., W., F., at 10:. EXAM GROUP: 3
The literature of the Republic and early Augustan period. Reading of extensive selections from the major authors, with lectures and discussion on the evolution and development of Latin prose and poetry. The course focuses on a variety of issues: Latin individuality through manipulation of inherited Greek forms, metrical and stylistic developments, evolving poetics, intertextuality and genre renewal, dynamic effects of social and political contexts.

**Latin 112b. History of Latin Literature II**
Catalog Number: 7643
Jan Felix Gaertner
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
The literature of the late Republic and Principate. We shall read extensive selections from major authors across a range of genres, considering their form and content against their historical contexts. Class will consist of a mixture of prepared translation from Latin and introductory lectures.

**Latin 120. Petronius: Satyricon - (New Course)**
Catalog Number: 44031
R. J. Tarrant
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Reading and analysis of the surviving portions of Petronius’ *Satyricon*. Topics to be treated include the style(s) and genre(s) of the work, elements of parody and satire, and connections to Neronian literature, culture, and society.

**Latin 129. Latin Epigraphy**
Catalog Number: 1088
Kathleen M. Coleman
Half course (fall term). M., W., F., at 12. EXAM GROUP: 5
An introduction to the study of Latin inscriptions from across the Empire in all media, chiefly stone, but also clay, glass, metal, mosaic, plaster, and wood. Texts to be studied range from official documents (senatorial decrees, colonial charters, market-timetables) to personal records (epitaphs, "lost and found” notices, amatory graffiti), from the late Republic to the early Christian period. Students learn how to transcribe, supplement, and translate these texts, and interpret them within their social and cultural context.
*Note:* May be taken for graduate credit as **Classical Philology 219. Latin Epigraphy** with permission of the instructor.

**Latin 132. Cicero Orations and Rhetorica**
Catalog Number: 85183
Timothy Gordon Barnes
Half course (spring term). M., W., at 10.
Introduction to the theory and practice of oratory in late republican Rome. The course examines the formation of the actual and the ideal orator, as evidenced by the early speeches and in the theoretical works. Readings in Latin from selected court speeches, the *De oratore* and *Brutus*.

**Latin 134. Archaic Latin**
Catalog Number: 1327
Timothy Gordon Barnes  
*Half course (fall term). W., 3–5.*  
Essentials of Latin comparative and historical grammar, with readings of early Latin inscriptions, legal texts, and selections from Livius Andronicus, Plautus, Ennius, and Cato.

**Latin 135. Seneca and Lucan - (New Course)**  
Catalog Number: 87311  
Andreas Thomas Zanker  
*Half course (spring term). M., W., at 3. EXAM GROUP: 8*  
Selected letters of Seneca and book one of Lucan’s *Pharsalia*. This course will consider the works of uncle and nephew, two of the leading exponents of Neronian literature, against their historical backdrop. Genre, theme, literary style, and the relationship of past and present will be key points of focus.

**Primarily for Graduates**

*Latin 201. Reading Latin*  
Catalog Number: 7642  
Richard F. Thomas  
*Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13*  
Readings of Latin prose and poetry ranging from archaic to imperial, with emphasis on variety, quantity, and quick comprehension of syntactic, stylistic, and generic features.  
*Note:* Intended for graduate students in Classical Philology as preparation for the general examinations.

**Cross-listed Courses**

[Medieval Studies 201 (formerly Medieval Studies 101). The Auxiliary Disciplines of Medieval History: Proseminar]  
*Medieval Studies 202. Latin Palaeography and Manuscript Culture: Seminar*  
*Philosophy 320. Philosophy in Translation: Latin*

**Medieval Greek**

**For Undergraduates and Graduates**

*Medieval Greek 115ar. Introduction to Byzantine Greek*  
Catalog Number: 7682  
Sarah Elizabeth Insley  
*Half course (spring term). Tu., Th., at 10. EXAM GROUP: 12*  
Introduces students to medieval Greek language and literature and, through selected readings, to important elements of Byzantine culture and society. Texts will be selected to provide a diachronic survey of a variety of literary genres, to reflect the diversity of Byzantine life and letters. Topics will include: biography/hagiography, historiography, sacred and secular poetry, letters, the novel, homilies and rhetorical texts. Choice of texts will correspond in part to the
specific needs and interests of participants.
Prerequisite: Greek Ba or equivalent.

Medieval Latin

Primarily for Undergraduates

Cross-listed Courses

*Freshman Seminar 38n. Dead and Loving It?: The Cult of the Saints in the Late Antique and Medieval Eastern Mediterranean
Latin Bam (formerly Latin 3m). Latin Prose Selections (Late Antique and Medieval)
Latin Bbm (formerly Latin 4m). Introduction to Latin Poetry (Late Antique and Medieval)

For Undergraduates and Graduates

Medieval Latin 106. Augustine - (New Course)
Catalog Number: 21473
Justin Anthony Stover
Half course (fall term). M., W., at 9. EXAM GROUP: 2
This course will explore the massive corpus of the 5th century North African bishop, who stands as both of one of the principle heirs of the Latin Classical tradition and the foundational figure of Western Christianity. Students will read large portions of his autobiographical Confessions as well as substantial selections from the City of God, On Christian Learning, his biblical exegesis, and his sermons.
Prerequisite: Latin Ba, Bb, Bam, Bbm, or equivalent.

Primarily for Graduates

Medieval Latin 251 (formerly Medieval Latin 151). Virgil in the Middle Ages - (New Course)
Catalog Number: 11903
Jan Ziolkowski
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Examines the reception of Virgil in the Middle Ages. Considers approaches taken to the Aeneid in particular in medieval education, from the most literal glosses and commentary in grammar schools to the allegorizations found in more advanced milieux. Surveys adaptations of Virgil’s poems by vernacular poets (especially English, French, Italian, and German). Focuses also on folklore associated with Virgil and his poetry.

Cross-listed Courses

[History 2055hf (formerly History 2055). Early Medieval History: Communications in the Early Medieval Mediterranean: Seminar]
[Medieval Studies 201 (formerly Medieval Studies 101). The Auxiliary Disciplines of}
Medieval History: Proseminar]

*Medieval Studies 202. Latin Palaeography and Manuscript Culture: Seminar

Modern Greek

For Undergraduates and Graduates

Modern Greek A. Elementary Modern Greek
Catalog Number: 8604
Vassiliki Rapti and assistant
Full course. M., W., F., at 12, and a weekly hour for conversation on F., at 11. EXAM GROUP: 5
For students with no knowledge of modern Greek. Basic oral expression, listening comprehension, grammar, reading, and writing. Language instruction is supplemented by reading of simple literary passages and other texts, as well as by online instruction.

Modern Greek B. Intermediate Modern Greek: Language and Civilization
Catalog Number: 8187
Vassiliki Rapti and assistant
Full course. Fall: M., W., F., at 11; Th., at 4; Spring: M., W., F., at 1 and a weekly section M., 2. EXAM GROUP: Fall: 4; Spring: 6
Aims at further development of skills in speaking, comprehension, reading, and writing. Selected readings in prose (literary and journalistic), poetry, folksongs, modern music, and theater serve as an introduction to aspects of modern Greek literature and culture. The course is conducted in Greek and focuses on topics selected by the instructor and the students in the first term. Grammar is reviewed in the context of readings. Instruction is supplemented by online instruction.
Prerequisite: An elementary knowledge of modern Greek (equivalent to that of Modern Greek A).

*Modern Greek 100. Advanced Modern Greek: Introduction to Modern Greek Literature
Catalog Number: 8487
Vassiliki Rapti
Half course (spring term). W., at 3 and Th., 1–3. EXAM GROUP: 8, 15, 16
Literary, sociocultural, and linguistic analysis of selected readings in prose, poetry, plays, orally transmitted songs, and folktales.
Note: Conducted in Greek.
Prerequisite: Modern Greek B or equivalent and permission of instructor.

Modern Greek 104. Modern Greek Theatre - (New Course)
Catalog Number: 46277
Vassiliki Rapti
Half course (fall term). Th., 1–3.
This course examines Modern Greek theatre in its multiple aspects from its relation to Greek tragedy through the stage revival of ancient drama to its contemporary status. Through a variety of perspectives and methods, students will explore several seminal plays with a particular
emphasis on contemporary playwrights and avant-garde stage directors. Course taught in English. No Final Exam.

**Modern Greek 145 (formerly Comparative Literature 145). Dreams and Literature**
Catalog Number: 8412
Panagiotis Roilos
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
Against the dual background of ancient and medieval commentaries on the one hand, and modern psychoanalytic and ethnographic studies on the other, diverse literary texts will be explored. The major focus will be on Greek literature, but examples from other European literatures will also be considered (including film). Major topics: typology of dreams; dreams as narratives; dreaming and writing; religious dimensions. Theoretical readings to include: Aristotle, Aelius Aristides, Artemidorus, Synesius of Cyrene; Freud, Jung, Levi-Strauss, Foucault, Lyotard.
*Note:* Students who have previously taken Comparative Literature 145, Dreams and Literature, may not take this course for credit.

**Primarily for Graduates**

**Modern Greek 220. Greek Imaginaries - (New Course)**
Catalog Number: 82692
Panagiotis Roilos
*Half course (spring term). Tu., 11–1. EXAM GROUP: 13, 14*
Explores theoretical discussions and literary exemplifications of the concepts of "phantasia," fictionality, the marvelous, and the real in Greek contexts, with a special focus on early modern Greek literature and thought.

**Modern Greek 221. The Poetics of Eros: From Plato to C. P. Cavafy - (New Course)**
Catalog Number: 97799
Panagiotis Roilos
*Half course (fall term). M., 4–6.*
Explores postclassical Greek and broader European literary receptions of Plato’s theory of *eros.* Special emphasis is placed on the rediscovery of "Hellenic love" in British aestheticism and Greek modernism, especially in C. P. Cavafy.

**Cross-Listed Courses**

[Comparative Literature 266. Irony]
[Comparative Literature 288. The Ancients and the Moderns: Modern Critical Theory and the Classics]

**Cross-listed Courses in Other Languages**

[Classical Philology 225. Pindar]
**Comparative Literature 298. Allegory - (New Course)**
**Egyptian Aa. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs I**
Comparative Literature

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Comparative Literature

David Damrosch, Ernest Bernbaum Professor of Literature (Chair)
Daniel Albright, Ernest Bernbaum Professor of Literature (on leave 2012-13)
Svetlana Boym, Curt Hugo Reisinger Professor of Slavic Languages and Literatures and Professor of Comparative Literature
Joaquim-Francisco Coelho, Nancy Clark Smith Professor of the Language and Literature of Portugal and Professor of Comparative Literature (on leave 2012-13)
Verena A. Conley, Visiting Professor of Comparative Literature and of Romance Languages and Literatures (fall term only)
James Engell, Gurney Professor of English Literature and Professor of Comparative Literature
Luis M. Girón Negrón, Professor of Romance Languages and Literatures and of Comparative Literature
Rita B. Goldberg, Lecturer on Literature
John T. Hamilton, Professor of Comparative Literature (Director of Graduate Studies)
Biodun Jeyifo, Professor of African and African American Studies and of Comparative Literature (on leave spring term)
Christopher D. Johnson, Associate Professor of Comparative Literature
Christine S. Lee, Lecturer on Literature
Christie McDonald, Smith Professor of French Language and Literature and of Comparative Literature
Sandra Naddaff, Senior Lecturer on Literature and Comparative Literature (Director of Undergraduate Studies)
Gregory Nagy, Francis Jones Professor of Classical Greek Literature and Professor of
Comparative Literature
Stephen Owen, James Bryant Conant University Professor (on leave fall term)
Ilana Pardes, Visiting Professor of Comparative Literature and of Near Eastern Languages and Civilizations (Hebrew University)
Francois Proulx, Lecturer on Literature
Martin Puchner, Byron and Anita Wien Professor of Drama and of English and Comparative Literature
Panagiotis Roilos, George Seferis Professor of Modern Greek Studies and of Comparative Literature
Judith Ryan, Robert K. and Dale J. Weary Professor of German and Comparative Literature
Marc Shell, Irving Babbitt Professor of Comparative Literature and Professor of English
Werner Sollors, Henry B. and Anne M. Cabot Professor of English Literature and Professor of African and African American Studies (on leave spring term)
Diana Sorensen, James F. Rothenberg Professor of Romance Languages and Literatures and of Comparative Literature, Dean of Arts and Humanities
Susan R. Suleiman, C. Douglas Dillon Professor of the Civilization of France and Professor of Comparative Literature (on leave fall term)
Christina Lynne Svendsen, Lecturer on Comparative Literature
Karen Thornber, Professor of Comparative Literature (on leave spring term)
William Mills Todd III, Harry Tuchman Levin Professor of Literature and Professor of Comparative Literature
Ruth R. Wisse, Martin Peretz Professor of Yiddish Literature and Professor of Comparative Literature (on leave fall term)
Karen Zumhagen-Yekplé, College Fellow in the Department of Comparative Literature

Committee on Literature

David Damrosch, Ernest Bernbaum Professor of Literature (Chair)
Daniel Albright, Ernest Bernbaum Professor of Literature (on leave 2012-13)
Svetlana Boym, Curt Hugo Reisinger Professor of Slavic Languages and Literatures and Professor of Comparative Literature
Julie A. Buckler, Professor of Slavic Languages and Literatures, Harvard College Professor
James Engell, Gurney Professor of English Literature and Professor of Comparative Literature
Luis M. Giron Negrón, Professor of Romance Languages and Literatures and of Comparative Literature
Rita B. Goldberg, Lecturer on Literature
John T. Hamilton, Professor of Comparative Literature (Director of Graduate Studies)
Christopher D. Johnson, Associate Professor of Comparative Literature
Christine S. Lee, Lecturer on Literature
Christie McDonald, Smith Professor of French Language and Literature and of Comparative Literature
Sandra Naddaff, Senior Lecturer on Literature and Comparative Literature (Director of Studies)
Gregory Nagy, Francis Jones Professor of Classical Greek Literature and Professor of Comparative Literature
Stephen Owen, James Bryant Conant University Professor (on leave fall term)
Francois Proulx, Lecturer on Literature
Judith Ryan, Robert K. and Dale J. Weary Professor of German and Comparative Literature
Marc Shell, Irving Babbitt Professor of Comparative Literature and Professor of English
Werner Sollors, Henry B. and Anne M. Cabot Professor of English Literature and Professor of African and African American Studies (on leave spring term)
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Christina Lynne Svendsen, Lecturer on Comparative Literature
Karen Thornber, Professor of Comparative Literature (on leave spring term)
William Mills Todd III, Harry Tuchman Levin Professor of Literature and Professor of Comparative Literature
Justin Weir, Professor of Slavic Languages and Literatures and of Comparative Literature (on leave 2012-13)

Other Faculty Offering Instruction in the Department of Comparative Literature

Giuliana Bruno, Professor of Visual and Environmental Studies
George G. Grabowicz, Dmytro Cyzevs’kyj Professor of Ukrainian Literature
William E. Granara, Professor of the Practice of Arabic on the Gordon Gray Endowment
Alexander Rehding, Fanny Peabody Professor of Music

Primarily for Undergraduates

*Literature 91r. Supervised Reading and Research
Catalog Number: 1074
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (fall term; repeated spring term). Hours to be arranged.
A graded, supervised course of reading and research to be conducted by a person approved by the Committee.
Note: Permission of Director of Studies required.

Literature 96. Introduction to Literary Studies (Formerly Literature 12)
Catalog Number: 57859 Enrollment: Limited to 20.
François Proulx
Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18
Introduces key questions, concepts and tools for the study of literature through a sustained reflection on the practice of reading. How and why do we read? How do we talk about what we read? How do literary texts represent, reflect on, inflect, or even resist reading? What can be revealed or achieved through critical reading and writing? Features a wide range of literary and theoretical texts including Goethe, Mary Shelley, Proust, Borges, and Anne Carson.

*Literature 97. Tutorial — Sophomore Year
Catalog Number: 4595
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (spring term). Hours to be arranged.
Successful completion of Literature 97 is required of all concentrators in their sophomore year.
*Literature 98a. Tutorial — Junior Year
Catalog Number: 3119
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (fall term). Hours to be arranged.
Successful completion of one term of Literature 98a is required of all concentrators in their junior year.

*Literature 98b. Tutorial — Junior Year
Catalog Number: 1528
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (spring term). Hours to be arranged.
Successful completion of one term of Literature 98b is required of all concentrators in their junior year.

*Literature 99a. Tutorial — Senior Year
Catalog Number: 4857
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (fall term). Hours to be arranged.
Successful completion of one term of Literature 99a is required of all concentrators in their senior year.

*Literature 99b. Tutorial — Senior Year
Catalog Number: 1290
Sandra Naddaff and members of the Committee and Tutorial Board
Half course (spring term). Hours to be arranged.
Successful completion of one term of Literature 99b is required of all concentrators in their senior year.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 29 (formerly Literature and Arts A-48). Modern Jewish Literature]
Aesthetic and Interpretive Understanding 50 (formerly Literature 128). Literature and Medicine
Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization
Culture and Belief 53. Sacred and Secular Poetry - (New Course)
Culture and Belief 55. Enlightenment Creations of the Self, Society, and Institutions - (New Course)
Ethical Reasoning 32. Security: Carefree or Careless - (New Course)

For Undergraduates and Graduates

Literature 101 (formerly Literature 11). Writing Across Cultures: Literatures of the World (from 1750 to the present)
Catalog Number: 4361
David Damrosch
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
An overview of world literature in the modern period through a series of international styles and literary ideological movements. In lectures, discussions, and close readings of theoretical and imaginative texts from around the world, we will examine "world literature" as an emerging concept in relation to such forces as censorship, propaganda, translation, centers, contact zones, and canon formation.
Note: This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[Literature 103 (formerly Literature 10). Writing Across Cultures: Literatures of the World (to 1750)]
Catalog Number: 9074
Stephen Owen
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
An overview of world literatures from the earliest texts to the Enlightenment, treating multi-ethnic classical literatures, the formation of ethnic vernacular literatures, and zones in which literary cultures met. Will examine how cultural identity has been constructed in literature.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[*Literature 104. On Theory]*
Catalog Number: 8760 Enrollment: Limited to 20.
Verena A. Conley
Half course (fall term). Hours to be arranged.
What is theory? What is the difference between literary, critical and cultural theory? What is the relation between theory and reading? This course introduces students to various concepts of theory (Derrida, Deleuze, Foucault, Balibar, Adorno, Benjamin, Freud, Saussure, Cixous, Kristeva, Butler and others). Focuses on theoretical texts and will bring in literary texts where necessary.
Note: Expected to be given in 2013–14.

[*Literature 106. On Lyric]*
Catalog Number: 6351 Enrollment: Limited to 20.
Christopher D. Johnson
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
Explores the history of Western lyric poetry and how lyric gives voice to the recurrent themes of love and death, and serves as a vehicle of self-discovery. Poetic techniques and forms will be examined, as will the roles that lyric has played as a vehicle for intellectual and cultural values. Poets to be read include Sappho, Catullus, Ovid, Bertran de Born, Dante, Petrarch, Donne, Quevedo, Sponde, Labé, Blake, Dickinson, Baudelaire, Hölderlin, Rimbaud, Celan, Pound, Akhmatova, and Carson.
Literature 108. On the Essay
Catalog Number: 28173
Christopher D. Johnson
Half course (fall term). W., 4–6. EXAM GROUP: 9
This course examines the aesthetics, motives, and history of the literary essay. Attention will be given to the essay’s forms (and formlessness), styles, subjectivities, receptions, and some of its characteristic content. Exemplary essayists to be studied include: Montaigne, Bacon, Johnson, Voltaire, the Schlegels, De Quincey, Beaudelaire, Woolf, Turgenev, Lu Hsun, Emerson, Thoreau, Benjamin, Borges, Mencken, Baldwin, Davenport, Sontag, Suleri, Berry, Eco, Dillard, and Foster Wallace.

*Literature 109. On Translation
Catalog Number: 0594 Enrollment: Limited to 20.
Sandra Naddaff
Half course (fall term). Tu., 1–3.
Examines theories of translation from various periods (Dryden, Schopenhauer, Schleiermacher, Benjamin, de Man, among others). Also looks closely at specific translated texts (e.g., various English translations of The Thousand and One Nights), and considers such topics as the notion of “unequal languages,” the problem of cultural translation, translation post-9/11, and the possibility of untranslatability. Final project involves an original translation and commentary. Note: Preference given to Literature concentrators. Prerequisite: Reading knowledge of one foreign language.

[*Literature 110. Introduction to Experimental Criticism]
Catalog Number: 36502
Dennis Yi Tenen
Half course (spring term). W., 10–12. EXAM GROUP: 3, 4
What can literary analysis tell us about emerging textual practices: cooperation and co-authorship on Wikipedia, the usage of Twitter during protest movements, self-fashioning on Facebook, review culture on Amazon.com, and fundamentally, about the deluge of information that accompanies the advent of the information age? In this course, taught in conjunction with a graduate seminar sponsored by Harvard’s metaLab, we will learn to think big about digital archives, information architectures, live data, and large-scale textual corpora. Note: Expected to be given in 2013–14.

Literature 113 (formerly Humanities 16). Existential Fictions: From Saint Augustine to Jean-Paul Sartre and Beyond
Catalog Number: 3016
Verena A. Conley
Half course (fall term). M., W., at 12.
This course examines problems of existence in relation to self and other in the world from the early Christian era to our days. It shows how existence preoccupies major writers who have approached its implications (and the dilemmas it inspires) in different ways. At stake are the
redemptive powers of religion, thoughts about the death of God, the limits of atheism, and philosophies of becoming. Texts by Saint Augustine, Montaigne, Pascal, Kierkegaard, Dostoyevsky, Nietzsche, Gide, Heidegger, Sartre, Camus, Simone de Beauvoir, and others.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[*Literature 116. Literature and Science*]
Catalog Number: 6289 Enrollment: Limited to 20.
Christopher D. Johnson
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
Explores how literature in different historical periods represents and reshapes the ideas, methods, and language of science. Compares the ways reason and the imagination function in literature and science. Considers how literature rethinks the cultural and historical significance of the scientific enterprise. Primary texts include Lucretius, Copernicus, Donne, Kepler, Cavendish, Fontenelle, M. Shelley, Goethe, Darwin, Calvino, and Lem.

*Note:* Expected to be given in 2013–14.

[*Literature 119. On Comparative Arts*]
Catalog Number: 0078 Enrollment: Limited to 18.
Marc Shell and Daniel Albright
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Is there one Art, or are there many arts? We will consider affinity and difference among literature, painting, music, and other arts. Student projects will investigate works of art that submit to or reject a particular material medium. Theory from Plato (Ion), Aristotle, Lessing, Burke, Diderot, Rousseau, Hegel, Pater, Greenberg, Heidegger; examples from Homer, Leonardo, Turner, Monet, Rossetti, Wagner, Richard Strauss, Apollinaire, Schoenberg--and others.

*Note:* Expected to be given in 2013–14.

[*Literature 121. 1001 Nights: Adaptations, Transformations and Translations*]
Catalog Number: 5879 Enrollment: Limited to 15.
Sandra Naddaff
Half course (fall term). Hours to be arranged.
Examines how the 1001 Nights is transformed and adapted for different media and genres. Focuses on a variety of films, (e.g., The Thief of Baghdad, Chu Chin Chow, Aladdin), illustrations/images (e.g., Doré, Chagall, Matisse), musical and balletic renditions (e.g., Rimsky-Korsakov, Fokine), translations (e.g., Galland, Lane, Burton, Haddawy), and re-tellings of stories (e.g., Poe, Barth, Mahfouz, Sebbar, Zimmerman). Also considers the role of the 1001 Nights in contemporary popular culture.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[*Literature 122. Fictional Encyclopedias*]
Catalog Number: 30653
Christopher D. Johnson
Half course (fall term). Hours to be arranged.
2012-2013 Previous Courses of Instruction

Examines the aesthetic and philosophic virtues of fictional encyclopedias by Rabelais, Sterne, Flaubert, Stein, Woolf, Borges, Eco, Queneau, Calvino, Kis, and Gadda. Considers also the mythic, historical, and material aspects of such encyclopedism.
Note: Expected to be given in 2013–14.

[Literature 125. The Desire for Narrative: Across Cultures, Forms and Media]
Catalog Number: 70867
Biodun Jeyifo
Half course (fall term). Hours to be arranged.
An exploration of the cultural roots of the powerful human desire both to tell and be told stories, in full and not in fragments. We will range across diverse societies and cultural forms and media like fiction, drama, film, television and oral performances.
Note: Expected to be given in 2013–14.

Literature 129. Reading the 18th Century Through 21st-Century Eyes
Catalog Number: 8742
Christie McDonald
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Why study the French Enlightenment today and how? How do discussions of principle play out in real-world events? Analysis of works from the eighteenth century juxtaposed with novels, plays, media events, operas, photography and films of the 20th-21st centuries; debates in literature, philosophy and the arts about cultural differences, universality, and the search for belief and confidence in a society undergoing dramatic change. Topics include the reworking of issues urgent then as now: equality, justice, freedom, tolerance, torture, human rights, the relation of the personal to the political, the role of opinion and the media in ethical interpretation.

[Literature 130. European Romanticism]
Catalog Number: 92331
John T. Hamilton
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
A comparative study of German, French, and English projects of literary experimentation, philosophical reflection, and political critique grouped under the term Romanticism, with a dual focus on the original historical contexts around 1800 and subsequent theoretical accounts.
Note: Expected to be given in 2013–14.

[*Literature 131. The Arab-American Experience in Fiction, Film, and Popular Culture - (New Course)]
Catalog Number: 42752 Enrollment: Limited to 15.
Sandra Naddaff
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Since 9/11, there has been an explosion of work about the Arab-American experience. This course will explore that experience as expressed in various cultural forms—fiction, film, comedy acts, graphic novels, memoirs, art installations, and new media. We will pay particular attention to contemporary works, although we will also consider the work of early 20th-century Arab-American writers. Topics include mapping the exilic experience, translation and bilingualism,
and the semiotics of food. No knowledge of Arabic is required.  
Note: Expected to be given in 2013–14.

[Literature 136. The historical novel after modernism]  
Catalog Number: 83405  
David Damrosch  
Half course (spring term). M., 4–6. EXAM GROUP: 9  
Modernism emphasized ruptures with the past and the uncertainty of historical knowledge; one  
consequence of this emphasis was a general turning away from the historical novel, seen as the  
most deluded form of nineteenth-century realism. This situation began to change around the time  
of World War II, when a growing number of novelists schooled in modernism began to write  
serious historical fiction. This course will explore the motives for such writing and the strategies  
of research, structure, style, dialogue, and characterization that once again made historical fiction  
a compelling enterprise, on the far side of the modernist critique of history. Readings in Borges,  
Yourcenar, Tolkien, Rhys, Endo, Mishima, Morrison, Calvino, Pamuk, and the Tibetan  
postmodernist Jamyang Norbu.  
Note: Expected to be given in 2013–14.

[Literature 140. Literature and Politics]  
Catalog Number: 19169  
Ruth R. Wisse  
Half course (spring term). Hours to be arranged.  
Studies interactions between literature and politics in psalms, poems, novels, polemics, etc.  
Using examples from the often contentious history of Jewish national sovereignty, investigates  
how variously literature advances and complicates political developments. Seminar format.  
Note: Expected to be given in 2013–14.

[Literature 141. Comparative Modern Anglophone Drama - A Seminar on Genealogy]  
Catalog Number: 40789  
Biodun Jeyifo  
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8  
The course will explore Anglophone drama in diverse areas of the English-speaking world.  
Through an attention to the genealogical filiations in the works of Irish, African, Caribbean and  
U.S. playwrights like Friel, Soyinka, Fugard, Walcott and Shange, the seminar will be organized  
around two principal issues: the use of folk, ritual, vernacular and carnivalesque performance  
idioms to transform the received genre of Western literary drama; themes of empire, colony and  
postcolony in the making of the modern world. Some knowledge of classical and avant-garde  
theories of drama and theatre would be useful, but is not a prerequisite for this course.  
Note: Expected to be given in 2013–14.

[*Literature 146 (formerly *Literature 124). Space and Place in Postmodern Culture]  
Catalog Number: 8228 Enrollment: Limited to 20.  
Verena A. Conley  
Half course (spring term). Tu., 11:30–1, and a weekly film screening to be arranged. EXAM  
GROUP: 6, 7  
Focuses on renewed awareness of space in contemporary theory, literature and film. Examines
notions of space and place under the impact of consumerism and electronic technologies in a
global world. Texts and films include Lefebvre, Godard, de Certeau, Wenders, Baudrillard,
Perec, Tati, Augé, Deleuze and Guattari, Virilio and Verhoeven.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the
Core area requirement for Literature and Arts C.

**Literature 150. Colonial and Post-Colonial Spaces: France-North Africa**
Catalog Number: 89597
*Verena A. Conley*
Half course (spring term). *W.*, 1–3. EXAM GROUP: 6, 7
This course focuses on transformations of colonial and post-colonial spaces in North Africa that
include Morocco, Tunisia and Algeria by way of fiction, film, critical and cultural theory.
Explores shifting relations between North Africa and France but also Italy and Spain with special
attention to concepts of nation, community, migration, transnationalism and translation.
Readings and viewings of works by Bowles, Camus, Choukri, Cixous, Djebar, Genet, Lakous,
Maalouf, Memmi, Taia and others.

*Note:* Expected to be given in 2013–14.

**Literature 152. Epic and Opera**
Catalog Number: 52781
*Gregory Nagy*
Half course (spring term). *M.*, *W.*, at 11. EXAM GROUP: 4
Comparisons in form and content, allowing for a wide variety of interpretations and methods.
Composers to be studied range from Homer and Virgil to Mozart and Monteverdi to Wagner and
Borodin. Special topics include romantic heroism, from Achilles in the ancient Greek "Song of
the Ethiopians" to Violetta in Verdi’s "La Traviata". Besides pre-set readings and audio/video
assignments, students will be encouraged to develop their own material for study and their own
comparisons. No prerequisites in language or music skills. Relevant points of interest include
genres that transcend classical notions of epic or opera, such as Korean "p’ansori" and medieval
French "chantefable".

*Note:* Expected to be given in 2013–14.

**Literature 153 (formerly Comparative Literature 153). Saul Bellow and the New York
Intellectuals**
Catalog Number: 2506
*Ruth R. Wisse*
Half course (spring term). *Th.*, 1-3, and a weekly section to be arranged.
Studies Bellow’s major works in the context of the intellectual and literary community that
constituted America’s first European style “intelligentsia.” Considers work of Isaac Rosenfeld,
Delmore Schwartz, Lionel Trilling, Irving Howe, writers of *Partisan Review* and *Commentary*.

*Note:* Class is conducted in a modified seminar format.

**Literature 154. Music, Literature, and the Voice**
Catalog Number: 65838
*John T. Hamilton*
Half course (fall term). *W.*, 1–3. EXAM GROUP: 6, 7
A comparative examination of literary, philosophical and theoretical works that deal with music and the phenomenon of the voice. Topics include: the role of the voice in myth; verbal and musical form; musical meaning and expression; reading, hearing and listening; music and psychoanalysis; evanescence and silence; narrative voice and responsibility.

[Literature 155 (formerly Literature 110). Furor Poeticus: Madness, Inspiration, Genius]
Catalog Number: 7758
John T. Hamilton
Half course (fall term). Th., 3-5.
Considers the classical conception of mania as a divine source of prophecy, ecstasy, poetic creation, and erotic desire; then traces its complex actualizations and afterlife in ancient tragedy and philosophy, Neoplatonism, Modernism, Psychoanalysis, and Film.
Note: Expected to be given in 2013–14.

[Literature 157 (formerly Comparative Literature 111). From Type to Self in the Middle Ages]
Catalog Number: 9245
Luis M. Girón Negrón
Half course (spring term). Hours to be arranged.
It has been argued that the poetic "I" in premodern literatures is not a vehicle for self-representation, but an archetype of the human. The course will examine this thesis against the rise of autobiographical writing in medieval and early modern Europe. Readings include spiritual autobiographies (Augustine, Kempe, Teresa of Ávila), letter collections, maqama literature, troubadour lyric, Hispano-Jewish poetry, pilgrimage narratives, medieval allegories, Dante and the picaresque novel. Theoretical perspectives by Spitzer, Lejeune, Zumthor and DeCerteau.
Note: Expected to be given in 2013–14. All readings in English translation. This course, when taken for a letter grade, meets the Core requirement for Literature and Arts C.

[Literature 160 (formerly Comparative Literature 160). Literary Forgeries and Mystifications]
Catalog Number: 3614
George G. Grabowicz
Half course (spring term). Hours to be arranged.
Examines literary forgeries and mystifications from the late 18th century to the present, focusing on their poetics, their ideological motivation and their role in modern political mythmaking (some texts considered: Ossian, The Igor Tale, the Czech manuscripts, the Protocols of the Elders of Zion, Ern Malley). Also considers the psychology and esthetics of simulation and mystification as reflected in the works of Gide, Borges, Nabokov, Pavic, Eco, and Calvino.
Note: Expected to be given in 2013–14. All readings in English.

[Literature 162 (formerly *Comparative Literature 207). Theory and Methods in Comparative Oral Traditions: Seminar]
Catalog Number: 7426
Gregory Nagy
Half course (spring term). Hours to be arranged.
Genres, forms, and themes of oral traditions in poetry and prose. Theories of performance and
composition. Comparative metrical and formulaic analysis.  
*Note:* Expected to be given in 2013–14. Knowledge of Greek not required.

**Literature 163. Jewish Languages and Literature**  
Catalog Number: 8627  
Marc Shell and Members of the Faculty  
*Half course (spring term).* Tu., 1-3, plus an additional hour to be arranged. EXAM GROUP: 15, 16  
What is a Jewish language? What is Jewish literature? General topics are alphabetization, translation, oral tradition and diaspora. Languages worldwide include Hebrew as well as Judeo-Spanish, -Aramaic, -Arabic, -French, -Greek, -Italian, -Persian, -Spanish, -Malayalam, Yiddish, and other secular Jewish languages. Readings usually include love stories, medical and philosophic texts, and writings on science, travel, and music. Guest scholars visit most weeks.  
No language requirement.  
*Note:* Language credit can be arranged.

**Literature 164. The 20th-Century Post-Realist Novel in Eastern Europe: Conference Course**  
Catalog Number: 7762  
George G. Grabowicz  
*Half course (spring term).* W., 1–3. EXAM GROUP: 6, 7  
Psychological, mythic, “catastrophist,” and comic tendencies in the Eastern and Central European novel between the two World Wars (1918–1939). Focus on Kafka, Capek, Zamiatin, Bulgakov, Platonov, Schulz, Witkiewicz (Witkacy), Gombrowicz and Nabokov.  
*Note:* All texts can be read in English translation.

**[Literature 165. The Holocaust and Problems of Representation]**  
Catalog Number: 55916  
Susan R. Suleiman  
*Half course (spring term).* M., 3-5:30 and a weekly film screening to be arranged.  
Can the story of the Holocaust be told? Is there such a thing as "the story" of the Holocaust? Who is authorized to tell it, and how? Do aesthetic categories apply to Holocaust art? Are some representations unacceptable? We explore these and other questions raised by a wide range of works (oral and written testimonies, novels, essays, comic strips, films, poetry, monuments) produced from 1945 to the present in Europe, Israel, and the US.  
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

**[Literature 166 (formerly Comparative Literature 166). The Comic Tradition in Jewish Culture]**  
Catalog Number: 3418  
Ruth R. Wisse  
*Half course (fall term).* Hours to be arranged.  
Jews are probably best known in America today for their roles in the Holocaust and in Humor. What, if anything, is the relation between these spheres? Does Jewish humor make fun of the Jews, or does it make fun of those who make fun of the Jews? Studies some of the theories and
uses of Jewish humor, some of its leading practitioners and outstanding works. Invites comparison with other comic traditions and investigation of “national” humor.  

*Note:* Expected to be given in 2013–14. Readers of Yiddish may take this course as Yiddish 200. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**[Literature 173. The Politics of Aesthetics]**

Catalog Number: 16366  
*Verena A. Conley*  
*Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18*  
Examines and compares the relation between politics and aesthetics in major texts by Lukacs, Benjamin, Adorno, Deleuze, Nancy, Ranciere, Badiou and Zizek.  

*Note:* Expected to be given in 2013–14.

**[Literature 174. Realism, Fantasy, and the Grotesque: Hoffmann and Balzac]**

Catalog Number: 14316  
*John T. Hamilton*  
*Half course (spring term). Hours to be arranged.*  
A close reading of select works by E.T.A. Hoffmann and his reception in the work of Balzac focuses on Realism’s indebtedness to the imaginative realms of the fantastic and the grotesque. Topics: music and inspiration; societal decadence and caricature; magic and the uncanny; experience, observation and expression.  

*Note:* Expected to be given in 2013–14. Texts may be read in English translation.

**[Literature 175. The Moment in Modernism]**

Catalog Number: 34842  
*Karen Zumhagen-Yekplé*  
*Half course (spring term). Tu., 5–7 p.m. EXAM GROUP: 18*  
This course explores theories of time in literature and visual culture, emphasizing the instances of revelation, epiphany, banality and boredom that become a pressing category in the ethical and aesthetic projects of modernism. Readings include texts by Proust, Woolf, Faulkner, Mann, Borges, Deleuze, Mulvey, Doane, Trotter, Gunning and films by Lumière, Melies, Eisenstein, Vertov, Lang, Dorsky.  

*Note:* Expected to be given in 2013–14.

**[Literature 183. Unhappy in their Own Way: Hebrew and Yiddish as a Literary Family]**

Catalog Number: 10165  
*Jordan David Finkin*  
*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
The relationship between modern Hebrew and Yiddish literatures and Jewish culture has famously been described as "two languages, one literature." This course aims to evaluate that opinion by exploring some of the startling variety in these literatures’ language, forms, and themes. Reading selected works in translation from these two languages together enriches and enhances our understanding of the vibrancy of modern Jewish culture.  

*Note:* Expected to be given in 2013–14.
**Literature 184. Imagining the City: Literature, Film, and the Arts**
Catalog Number: 2332
Giuliana Bruno and Svetlana Boym
Half course (fall term). Th., 11:30-1, and a weekly film screening Tu., and weekly sections to be arranged. EXAM GROUP: 14
How do visual representation and narrative figuration contribute to construct urban identity? Explores the urban imagination in different artforms: architecture, cinema, literature, photography, and painting. Topics to be mapped out include: cities and modernity, metrophilia and metrophobia, the museum and cultural archaeology, the ruin and the construction site, interior space and public sphere, technology and virtual cities. We will focus on the European city, as we travel through Paris, Berlin, St. Petersburg, Moscow, Naples, and Rome
*Note:* Students who have taken VES 184 previously may not take this course for credit. Cannot be taken concurrently with VES 184. Offered jointly with the Graduate School of Design as 4353. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**[Literature 185. Jewish Humor and Its Discontents]**
Catalog Number: 76794
Jordan David Finkin
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Humor has long been noted as a distinctive element of European Jewish culture. While this has been exaggerated as part of Jewish stereotypes, nevertheless humor, jokes, satire, and parody all feature prominently in modern Jewish literatures and culture. This course will look at some of the primary ideas about Jewish humor and how this distinctive Jewish "wit" appears in various texts. We will unpack why Jewish humor is funny and when it is no laughing matter.
*Note:* Expected to be given in 2013–14.

**[Literature 187r (formerly *Literature 187). Selected Topics in Poetics and Rhetoric: Seminar]**
Catalog Number: 7999
Gregory Nagy
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Comparative approaches to poetics and rhetoric. All readings for this course will be in English translations. Special arrangements for those who opt to read in the original languages. Selected texts include Aristotle’s *Poetics* and *Rhetoric.*
*Note:* Knowledge of Greek not required.

**[Literature 190. Literary Realisms in China and Russia]**
Catalog Number: 25272
Roy Chan
Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18
Course examines the development of a realist literary mode in Russia and China and considers it in the context of both empires’ struggle with belated modernity.
*Note:* Expected to be given in 2013–14.
Literature 193. "What’s Love Got to Do With It"; Love Poetry of the Middle Ages and Early Modernity - (New Course)
Catalog Number: 60925
Luis M. Girón Negrón
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Does love have a history? The course explores the literary history of love poetry in Europe and the Middle East from the Middle Ages through the 17th century. Reading selections from Latin and Romance love lyric (Provençal, Galician-Portuguese, French, Catalan, Spanish, the ‘jarchas’), Arabic and Hebrew muwashshahat, the Italian dolce stil novo, Sufi and Christian mystical poetry, the Petrarchan sonnet and its heirs (Portugal, England, Spain), Dante’s Vita nuova and erotic narrative verse (Juan Ruiz, Ibn Hazm, ‘Roman de la Rose’). Discussions framed by overview of premodern theories of love and recent scholarly debates on the origins of amour courtois.

Literature 195. Modernism’s Global Afterlife - (New Course)
Catalog Number: 82233
Karen Zumhagen-Yekplé
Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18
This course examines works contemporary literature that demonstrate a continued engagement with the formal, cultural and thematic ambitions of modernism as well as an investment in working to respond to or revise the aesthetic and ideological challenges that are modernism’s most recognizable legacy to world literature. Reading more recent literary works alongside their modernist precursors not only sheds light on the ethical, aesthetic and political stakes of contemporary fiction, but also opens up new ways of understanding their relationship to the various crises of language, identity, faith and empire that complicate modernism’s modes of experimental realism.

Literature 196. The Booker Prize: Aesthetics, Commerce and Canon-Making - (New Course)
Catalog Number: 30711
Karen Zumhagen-Yekplé
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
This study of a selection of Booker Prize winning novels focuses on the publicity and politics of prize culture; canon-building, literary innovation and its relationship to a diverse set of linguistic, theoretical, and world literary traditions. Course readings will include novels by Murdoch, Rushdie, Hulme, Ishiguro, Byatt, Okri, Ondaatje, Roy, McEwan, Coetzee, Pierre, Hollinghurst, Desai and Barnes, each seen and through the lens of the cultural phenomenon of a prize Barnes has described as "posh bingo."

Literature 197. Secularism and its Discontents: From Agnon to Amichai - (New Course)
Catalog Number: 39617
Ilana Pardes (Hebrew University)
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
This course will focus on two of the hermeneutic giants of modern Hebrew literature: S.Y. Agnon and Yehuda Amichai. Special attention will be given to the following questions: To what extent do these writers call upon us to reconsider the role of secularism in Israeli culture? To
what extent does religion remain a decisive component in the very definition of modernity for both? What are the aesthetic implications of their respective redefinition of what counts as sacred and what counts as secular? We will also consider the approaches of Agnon and Amichai within the broader context of Jewish thought on the question of secularism — primarily essays by Walter Benjamin and Gershom Scholem.

Cross-listed Courses

[African and African American Studies 111. Spectral Fictions, Savage Phantasms: Race and Gender in Anti-Racist South African and African American Drama, Fiction and Film ]
African and African American Studies 133. Zora Neale Hurston, Richard Wright, Ralph Ellison
African and African American Studies 137. Literature and Its Cultural ‘Others’ - America, Africa and the Caribbean, 1950s-80s
Culture and Belief 56 (formerly English 193a). The Culture of Capitalism - (New Course)
English 194. Literary Criticism: Major Approaches - (New Course)
French 165. Marcel Proust
Modern Greek 145 (formerly Comparative Literature 145). Dreams and Literature
Music 175r. Special Topics - (New Course)
[Slavic 143. Russian Formalism]
[Slavic 151. Experiments in Reading: Chekhov and Nabokov]
Slavic 157. Some Versions of Russian Pastoral - (New Course)
[Slavic 178 (formerly Literature 178). Trauma and Postmemory: Collective Identity and Unexperienced Loss: Conference Course]

Primarily for Graduates

[*Comparative Literature 211. Mysticism and Literature: Seminar]*
Catalog Number: 3867
Luis M. Girón Negrón
Half course (fall term). W., 1-3.
Trends and debates in the comparative study of mystical literature. Primary works by Jewish, Christian, and Muslim authors from the Middle Ages through the 16th century. Also modern authors (Borges, Eliot) and literary theorists (DeCerteau).
Note: Expected to be given in 2013–14. Permission of instructor required. Offered jointly with the Divinity School as 3802.

Comparative Literature 212. Kafka, Coetzee and the Difficulty of Reality - (New Course)
Catalog Number: 47273
Karen Zumhagen-Yekplé
Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18
This course examines selected works of two major modern writers, Franz Kafka and the South African Nobel Prize winner J.M. Coetzee, exploring their unique brands of literary realism, fantasy, and philosophical ethics and treatments of crises of identity, language, faith, authority and empire.
[Comparative Literature 214. Islandology: Isolating Definitions and Defining Islands]
Catalog Number: 49949
Marc Shell
Half course (spring term). W., 5–7 p.m. EXAM GROUP: 9
Islands, both a part of and apart from the main, offer ready-made laboratories for linguistic, biological and political investigation; islandness as such encourages national literature, philosophy, and vacation. Our seminar focuses on fictional islands as well as Canadian ice floes, Hormuz (Persia), Maine islets, and urban Venice. Aristotle, Plato, Darwin, Melville, Hesiod, Homer, Rabelais, More, Shakespeare, and Flaherty (director).
Note: Expected to be given in 2013–14.

[Comparative Literature 215. Comparative Literature and Intellectual History]
Catalog Number: 60867
Christopher D. Johnson
Examines implications of intellectual history for comparative literature, especially in regard to epistemology, methodology, aesthetics, and dynamics of historical influence and change. Authors include: Vico, Hegel, Cassirer, Blumenberg, Gadamer, Foucault, Skinner, Eco, Deleuze, and Agamben.
Note: Expected to be given in 2013–14.

[Comparative Literature 225. Literature of War and Peace: Imagining and Representing the End of World War II in Europe]
Catalog Number: 32059
Werner Sollors
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
How were the last phase of the war and the beginning of the postwar era represented in novels, films, letters, diaries, reportage, wire recordings, and research notes by scholars from 1945 to 1955? How do later popular images of the period differ? This course examines such questions with a focus on the American occupation of West Germany.
Note: Expected to be given in 2013–14.

[Comparative Literature 227. Comparative Modernism]
Catalog Number: 37313
David Damrosch
Half course (spring term). Hours to be arranged.
A survey of major works of modernist fiction in global context, going from early and ’high’ modernism to late modernism and its aftermath, together with critical and theoretical readings on modernism and modernity. Readings in Baudelaire, Rilke, Lu Xun, Bely, Proust, Barnes, Kafka, Asturias, Zhang Ailing, Yourcenar, and Mishima.
Note: Expected to be given in 2013–14.

[Comparative Literature 230. The Poetics of Empire: Colonization, Translation, and Literary Rewriting]
Catalog Number: 0694
Karen Thornber
Half course (fall term). W., 5–7 p.m.
Explores how (post)colonial writers from Asia, Africa, Latin America and the Middle East and writers from (former) imperial powers have reconfigured one another’s literatures. Rethinks concepts of world literature and cultural negotiation.
Note: Expected to be given in 2013–14.

[Comparative Literature 240. Paradoxes of the Secular-Sacred in Modernism ]
Catalog Number: 86364
Karen Zumhagen-Yekplé
Half course (fall term). F., 2–4. EXAM GROUP: 7, 8
This course examines secular modernism’s paradoxical attraction to mystery, transcendent and transformative experience in the context of its obsession with difficulty, with puzzles, riddles, unanswered-and often unanswerable-questions and quests for their solutions. Readings including Woolf, Kafka, Dostoyevsky, Forster, Adorno, William James, Benjamin, Derrida, Nietzsche, Wittgenstein.
Note: Expected to be given in 2013–14.

[Comparative Literature 242 (formerly Literature 242). Text, Image, Public Sphere]
Catalog Number: 34276
Svetlana Boym
Half course (spring term). Hours to be arranged.
The course examines relationship between verbal and visual communication in public realm through the analysis of literature, film, photography, architecture and public art. Focus on the new public media and on aesthetic and politics of the visual culture.
Note: Expected to be given in 2013–14. Open to qualified undergraduates and GSD students

[Comparative Literature 245. Intertextuality]
Catalog Number: 19804
Judith Ryan
Half course (spring term). W., 4–6.
Explores theories of intertextuality developed by Kristeva, Jauss, Bloom, Gilbert and Gubar, Genette, and others, and asks why the debates they have provoked have had such resonance in contemporary literary studies. A series of literary texts ranging from classical antiquity to the present will provide test cases for the various theories. Attention to such questions as influence, imitation, allusion, quotation, and plagiarism.
Note: Expected to be given in 2013–14.

[Comparative Literature 246. The Critic in Culture]
Catalog Number: 3141
David Damrosch
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
This class will examine the interplay of scholarly analysis and cultural critique in a range of major modern critics and theorists, exploring their stylistic and essayistic strategies as they seek to find - or create - an audience for their ideas. Readings in Nietzsche, Foucault, Benjamin, Kobayashi, Woolf, Adorno, Barthes, Cixous, Said, Miyoshi, Minh-ha, Anzaldúa, Penley, and
Agamben.
Note: Expected to be given in 2013–14.

**Comparative Literature 247. Baroque and Neo-Baroque Literature**
Catalog Number: 84314
Christopher D. Johnson
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Examines the Baroque as a literary style, historical period, and mode of thought. Focuses on 17th century European, Colonial American, and contemporary "Neo-Baroque" texts. Analogies between the literary, visual, and musical arts are explored.
Note: Note: All readings available in translation, but students are encouraged to work in the original language.

**Comparative Literature 248. American Multilingual Literature in a Transnational Context**
Catalog Number: 32792
Werner Sollors
Half course (spring term). Hours to be arranged.
This Longfellow Institute seminar works with original source materials in several different languages. Special focus is on the historiographic and critical treatment of non-Anglophone texts, on general and theoretical problems of an ongoing multilingual American tradition, on the recuperation and editing of texts, and on issues of translation.
Note: Expected to be given in 2013–14.

**Comparative Literature 250. Theories of Security**
Catalog Number: 80818
John T. Hamilton
Half course (fall term). Hours to be arranged.
Investigates the broader significance of the term "security" that has coursed through philosophical, literary and artistic productions across various historical and cultural traditions. Discussions address that which remains implicit, latent, or unthought in current political and governmental issues of security and biopolitics. Readings include: Sophocles, Plato, Seneca, Machiavelli, Hobbes, Leibniz, Nietzsche, Freud, Kafka, Heidegger, Schmitt, Arendt, Foucault, Agamben, and Virilio.
Note: Expected to be given in 2013–14.

**Comparative Literature 251. Literary Criticism and Theory: Antiquity to the Renaissance**
Catalog Number: 29296
John T. Hamilton
Half course (spring term). Hours to be arranged.
An historical and critical examination of key issues and debates in poetic theory, rhetoric, and literary interpretation. Topics include mimesis, catharsis, expression, performance, allegoresis, typology, semiotics, hermeneutics, verisimilitude, genre, decorum, and the sublime.
Note: Expected to be given in 2013–14.
Comparative Literature 252. The Literatures of Medieval Iberia: Approaches and Debates in their Comparative Study
Catalog Number: 38202
Luis M. Girón Negrón
Half course (fall term). W., 4–6. EXAM GROUP: 9
The cultural interactions in premodern Spain between Muslims, Christians and Jews shaped the literary history of Arabic, Hebrew and the Ibero-Romance vernaculars. Our seminar examines selected scholarly debates on the comparative study of these literatures.

[Comparative Literature 253. Literature, Art and Exile]
Catalog Number: 85798
Svetlana Boym
Half course (fall term). Hours to be arranged.
Does exile enable or stifle artistic creativity? How does the experience of exile shape the attitude towards local and global culture? The course examines forms of diasporic conscience in literature and visual arts focusing on the issues of estrangement and nostalgia, comparative modernities and exilic devices, nationalism and cosmopolitanism, immigrant aesthetic and conceptions of freedom. Special topic include America through the eyes of exile, text and image in the writing of the diaspora, reconsideration of the critical theory from the perspective of exile. Works by Nabokov. Brodsky, Cortazar, Borges, Arendt, Pamuk, Rushdie, Kis, Kafka.
Note: Expected to be given in 2013–14. All texts are available in English but reading in the original languages is encouraged.

[Comparative Literature 254. Modernist Polemics]
Catalog Number: 89724
Daniel Albright
Half course (spring term). Hours to be arranged.
Modernism’s theories of itself - manifestoes, polemics, strident declarations, urbane repudiations of the old-fashioned-tested against Modernist practice, in literature, music, and painting. I welcome students from disparate graduate programs in the university.
Note: Expected to be given in 2013–14.

Comparative Literature 256. Archeology of Modernity and Visual Culture
Catalog Number: 74617 Enrollment: Limited to 15. The course will include a creative experiments in photography, writing and digital media as well as analytic assignments. VES and GSD students welcome.
Svetlana Boym
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Explores contradictions of the modern experience in literature, philosophy, arts and architecture. Topics for 2010: nostalgia and modernization, public freedom and cross-cultural memory, archeology and the creative mapping of the urban space, culture and politics. Special attention to the relationship between critical theory and creative practice. Reading from Benjamin, Simmel, Shklovsky, Nabokov, Kafka, Arendt, Certeau, Lyotard, Derrida.

[*Comparative Literature 257. Trauma, Memory, and Creativity]*
Catalog Number: 7853
Susan R. Suleiman

Half course (fall term). W., 3–5. EXAM GROUP: 8, 9

We will examine classic and contemporary theories of psychic trauma in individual and collective contexts and explore the relations between trauma, resilience, play, and artistic innovation with special attention to modern literary autobiography; fiction; some attention to film and visual narrative.

Note: Expected to be given in 2013–14. Open to qualified juniors and seniors with permission of the instructor.

Prerequisite: Good reading knowledge of at least one non-English language.

[Comparative Literature 260. Renaissance and Baroque Drama]

Catalog Number: 15546

Christopher D. Johnson

Half course (fall term). Hours to be arranged.

Compares late Renaissance dramas by Marlowe, Shakespeare, Beaumont, Racine, Molière, Tirso de Molina, Calderón, Bruno, and Gryphius. Old and new critical approaches considered as well. Some knowledge of French, Italian, German, and/or Spanish helpful.

Note: Expected to be given in 2013–14.

[Comparative Literature 261. Fragments of a Material History of Literature]

Catalog Number: 6923

Jeffrey Schnapp

Half course (spring term). Hours to be arranged.

Literary studies studied from the perspective of the practices that have shaped ideas concerning literature, writing, speech, and communication: from scrolls and codices to the rise of printing and typewriting to digital writing.

Note: Expected to be given in 2013–14.

Comparative Literature 263. Journey, Exile, and Displacement in Modern Arabic Literature

Catalog Number: 3125

William E. Granara

Half course (fall term). M., 4–6.

The course examines narratives of journey, exile, and displacement in modern Arabic literature that trespass geographical, political and linguistic boundaries, and create new literary spaces that define and reshape modern Arab identities. Theoretical readings will include Pratt, Said, Rushdie and Kaplan.

Note: Arabic helpful but not required. Undergraduates welcome.

[Comparative Literature 264. Thinking and Writing Transculturally]

Catalog Number: 6133

Karen Thornber

Half course (spring term). Hours to be arranged.

Explores approaches to transculturation in the production and evaluation of literature in light of new understandings of human and textual border-crossings. Topics include the ethics of dividing cultural products along ethnic, linguistic, and national lines on the one hand and classifying...
phenomena as global on the other, and the ramifications of cross-cultural comparison. We also examine the relationship between creative production and such topics as empire, travel/diaspora, translingualism, and literary reconfiguration.

Note: Expected to be given in 2013–14.

[Comparative Literature 266. Irony]
Catalog Number: 9984
Panagiotis Roilos
Half course (fall term). Hours to be arranged.
Explores major European philosophical and aesthetic discourses on irony as well as literary manipulations of the trope from Greek antiquity to postmodernism.
Note: Expected to be given in 2013–14.

[Comparative Literature 269. Broken English: English Language Literature in a Postmodern, Postcolonial Frame]
Catalog Number: 91999
Biodun Jeyifo
Half course (fall term). W., 2-4. EXAM GROUP: 7, 8
An exploration of a range of experimental writings in the English Language predicated on the varieties of "engishes" spoken and used as idioms of writing and performance around the world. Special attention will be paid to theoretical and critical attempts to both assimilate these currents of expression into recognizable patterns and to create new categories of analysis, appropriation and legitimation.
Note: Expected to be given in 2013–14. This course is also listed as English 266, with catalog number 18837.

[Comparative Literature 273. Approaches to Modernity: The Metropolis]
Catalog Number: 2521
Svetlana Boym
Half course (fall term). W., 2-4; W., at 4.
Examines the relationship between urban experience and debates on modernity/postmodernity in art, architecture and social theory. Topics: nostalgia and modernization, cultural archeology and architecture of transition, memorial, museum and public art, national identity and cosmopolitan imagination, metropolis and megapolis.
Note: Expected to be given in 2013–14. Students in this class will be encouraged to attend lectures and screenings for VES 184 and develop individual research and/or creative projects.

[Comparative Literature 275. Theory of Narrative: Conference Course]
Catalog Number: 3105 Enrollment: Limited to 15.
William Mills Todd III
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Studies of selected narratives (fictional, psychoanalytic, historical, sacred) as semiotic structures, representations, rhetorical gambits, and cultural phenomena. Readings by Jakobson, Barthes, Bakhtin, Iser, Lukács, Foucault and others.
Note: Expected to be given in 2013–14. Open to advanced undergraduates and graduates. Recommended for potential teaching fellows.
[Comparative Literature 276. Renaissance Poetics and Rhetoric]
Catalog Number: 2534
Christopher D. Johnson
Half course (spring term). M., 1–3. EXAM GROUP: 6, 7
Examines Renaissance literary criticism and theory in the context of the arts of poetry and rhetoric. Topics include: imitation, translation, genre, decorum, and the conceit. Authors include: Petrarch, Tasso, Du Bellay, Sidney, and Gracián.
Note: Expected to be given in 2013–14.

[Comparative Literature 277. Literature and Diaspora]
Catalog Number: 6042
Karen Thornber
Half course (spring term). Hours to be arranged.
Examines creative and critical discourse from and about the African, Chinese, Indian, Japanese, Jewish, and Korean diasporas. Explores the relationship between diaspora and constructions of artistic and cultural identities, transculturation, translation, and multilingualism.
Note: Expected to be given in 2013–14.

[Comparative Literature 278. Failure and Change (Graduate Seminar in General Education)]
Catalog Number: 41112
Christie McDonald
Half course (fall term). Hours to be arranged.
Analysis of the failure of models and testing of limits in reflection about change, as well as the dialogue among literary, theological, socio-political, artistic, and philosophical discourses. Topics include authority, freedom, equality, sentiment, reason, fanaticism, tolerance. Readings include works from St. Augustine, Rousseau, Diderot, Kant, Proust, Koselleck, Rorty, Beauvoir, Sartre, Kofman, Beckett. The seminar will design and develop a General Education course on these themes for undergraduates; it will also contain an arts component.
Note: Expected to be given in 2013–14.

[Comparative Literature 280. History of Literary Criticism: Antiquity to the Renaissance]
Catalog Number: 84548
John T. Hamilton
Half course (fall term). Hours to be arranged.
Closely examines theoretical texts in the Classical Tradition on a vast array of topics and concepts: mimesis, poiesis, performance, rhetoric, exegesis, allegoresis, enthusiasm and the sublime. Readings from Greco-Roman antiquity to the European Renaissance.
Note: Expected to be given in 2013–14.

[Comparative Literature 283. Language Differences]
Catalog Number: 7468
Marc Shell
Half course (fall term). Hours to be arranged.
Considers language difference both as a literary theme and as a potent cause of war in the political arena. Historical foci include Europe, the Middle East, North America, and Africa.
Literary issues include translation, heteroglossia, cinematography, and multilingualism. Works of literature include Sophocles, Shakespeare, Goethe, and Dove.  

*Note:* Expected to be given in 2013–14.

**[Comparative Literature 286 (formerly Literature 148). Metaphor]**  
Catalog Number: 6074  
*Christopher D. Johnson*  
Half course (fall term). M., 5–7 p.m. EXAM GROUP: 9  
Explores the theory and practice of metaphor in literature, philosophy, and science. Topics include: the aesthetic, heuristic, and epistemological functions of metaphor; metaphor’s relation to allegory, irony, and other "major tropes." Authors include: Aristotle, Tesauro, Nietzsche, Jakobson, Freud, Ricoeur, Blumenberg, Kofman, Derrida, Eco.  

*Note:* Expected to be given in 2013–14. All readings will be available in translation, but students are encouraged to work in the original languages.

**[Comparative Literature 288. The Ancients and the Moderns: Modern Critical Theory and the Classics]**  
Catalog Number: 7557  
*Panagiotis Roilos*  
Half course (spring term). M., 4–6. EXAM GROUP: 9  
Explores the impact of classical literature and culture on the formation of modern critical theory. Topics include: construction of power; trafficability of art; ritual theory; sexuality; gender studies; irony; orality and literacy.  

*Note:* Expected to be given in 2013–14.

**Comparative Literature 294. Teaching World Literature World Literature in Theory and Practice - (New Course)**  
Catalog Number: 45818  
*David Damrosch*  
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9  
The study of world literature has achieved new prominence in recent years, and has fueled sometimes sharp debate in the process. What are the politics of teaching world literature today? With what relation to postcolonial studies, to globalization, world systems theory, translation theory, and classic comparative literature? This course will examine the uses and abuses of world literature in current teaching and scholarship, with theoretical and methodological readings in Moretti, Casanova, Spivak, Apter, Kadir, and others, paired with case studies from the modern era, from Molière and Chikamatsu Monzaemon to Derek Walcott and Bei Dao.

**Comparative Literature 295. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education) - (New Course)**  
Catalog Number: 15604  
*John T. Hamilton and Alexander Rehding*  
Half course (spring term). F., 1–3. EXAM GROUP: 6, 7  
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on “The Art of Listening,” by addressing questions such as the distinction between hearing and listening and, ultimately, between sense and
sensibility.
Note: The seminar will design and develop a General Education course on these themes for undergraduates.

**Comparative Literature 298. Allegory - (New Course)**
Catalog Number: 28338
Panagiotis Roilos
*Half course (spring term). M., 5–7 p.m. EXAM GROUP: 9*
It investigates major landmarks in the development of allegorization and allegorical literary composition in European tradition. Starting with pseudo-Herakleitos and his allegorical hermeneutics of the Homeric epics, this seminar will study different theoretical explorations and literary manifestations of allegorical discourse from antiquity to modernity—from ancient Greek rhetoric to Prudentius to Byzantine literature to Dante to the Romantics to C. P. Cavafy to Benjamin and de Man. Topics to be addressed include: personification, ambiguity, hermeneutic double-tonguedness (amphoteroglosia), the interplay between allegory and other tropes and discursive modes (metaphor, metonymy, symbol, parody, satire).

**Comparative Literature 299ar. Theory and Comparative Literature: Proseminar**
Catalog Number: 2431
Karen Thornber
*Half course (fall term). Tu., 6–8 p.m. EXAM GROUP: 18*
An investigation into current trends in comparative literature, literary history and comparative philology, with an emphasis on methodology and theory. Note: Required of first-year graduate students in Comparative Literature; others may be admitted by permission of the instructor. Note: Required of first-year graduate students in Comparative Literature; others may be admitted by permission of the instructor.

**Cross-listed Courses**

*English 251. Comparative Romantic Theory: Graduate Seminar*
*English 261. Joyce/Beckett: Graduate Seminar - (New Course)*
French 270. War and Memory: Representations of World War II and the Occupation in Postwar French Literature, History, and Film
French 271. Legacies of Post-structuralism: Politics, Ethics and Aesthetics
[History of Science 290. Critical History: Curating Images, Objects, Media: Seminar]
Jewish Studies 201. Bible, Literature, Culture: The Song of Songs: Seminar - (New Course)
Modern Greek 221. The Poetics of Eros: From Plato to C. P. Cavafy - (New Course)
[*Romance Studies 219. Digital Humanities 2.0: a metaLAB(at)Harvard seminar]*
Romance Studies 220. Fragments of a Material History of Literature - (New Course)

**Graduate Courses of Reading and Research**

*Comparative Literature 396. Preparation for the General Examinations*
Catalog Number: 4570
Daniel Albright 4615 (on leave 2012-13), Svetlana Boym 1926, Joaquim-Francisco Coelho 7715 (on leave 2012-13), Verena A. Conley 2250, David Damrosch 5998, James Engell 8076, Luis M.
Girón Negrón 3060, John T. Hamilton 3977, Biodun Jeyifo 1001 (on leave spring term), Christopher D. Johnson 4301, Christie McDonald 1160, Gregory Nagy 1423, Stephen Owen 7418 (on leave fall term), Julie Peters 6250, Martin Puchner 5842, Panagiotis Roilos 1982, Judith Ryan 1135, Marc Shell 3176, Werner Sollors 7424 (on leave spring term), Diana Sorensen 4214, Susan R. Suleiman 7234 (on leave fall term), Karen Thornber 5764 (on leave spring term), William Mills Todd III 1634, and Ruth R. Wisse 3177 (on leave fall term)

*Comparative Literature 397. Direction of Doctoral Dissertations
Catalog Number: 0320

*Comparative Literature 399. Reading and Research
Catalog Number: 2893
Daniel Albright 4615 (on leave 2012-13), Svetlana Boym 1926, Joaquim-Francisco Coelho 7715 (on leave 2012-13), Verena A. Conley 2250, David Damrosch 5998, James Engell 8076, Luis M. Girón Negrón 3060, John T. Hamilton 3977, Biodun Jeyifo 1001 (on leave spring term), Christopher D. Johnson 4301, Christie McDonald 1160, Sandra Naddaff 7779, Gregory Nagy 1423, Stephen Owen 7418 (on leave fall term), Julie Peters 6250, Martin Puchner 5842, Panagiotis Roilos 1982, Judith Ryan 1135, Marc Shell 3176, Werner Sollors 7424 (on leave spring term), Diana Sorensen 4214, Susan R. Suleiman 7234 (on leave fall term), Karen Thornber 5764 (on leave spring term), William Mills Todd III 1634, and Ruth R. Wisse 3177 (on leave fall term)

Candidates for the doctoral degree in Comparative Literature may pursue advanced studies under the individual supervision of these instructors.

Note: Permission of the instructor and the Chairman of the Department required.

Cross-listed Courses

*African and African American Studies 301. Graduate Proseminar

Computer Science
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the School of Engineering and Applied Sciences Offering Instruction in Computer Science

Ryan Prescott Adams, Assistant Professor of Computer Science
David M. Brooks, Gordon McKay Professor of Computer Science
Cristopher R. Cecka, Lecturer on Computational Science
Yiling Chen, Associate Professor of Computer Science
Stephen N. Chong, Assistant Professor of Computer Science
David Cox, Assistant Professor of Molecular and Cellular Biology and of Computer Science
Krzysztof Z. Gajos, Assistant Professor of Computer Science
John Andrew Girash, Lecturer on Engineering and Applied Sciences
Steven J. Gortler, Robert I. Goldman Professor of Computer Science (Director of Undergraduate Studies)
Barbara J. Grosz, Higgins Professor of Natural Sciences
Nathaniel Hardison, Preceptor in Computer Science
David J. Knezevic, Lecturer on Computational Science
Edward W. Kohler, Associate Professor of Computer Science
H. T. Kung, William H. Gates Professor of Computer Science and Electrical Engineering
Henry H. Leitner, Senior Lecturer on Computer Science
Harry R. Lewis, Gordon McKay Professor of Computer Science (on leave 2012-13)
David J. Malan, Senior Lecturer on Computer Science
Michael D. Mitzenmacher, Gordon McKay Professor of Computer Science, Area Dean for Computer Science
John G. Morrisett, Allen B. Cutting Professor of Computer Science
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Radhika Nagpal, Fred Kavli Professor of Computer Science (on leave 2012-13)
David C. Parkes, George F. Colony Professor of Computer Science, Harvard College Professor (on leave fall term)
Hanspeter Pfister, An Wang Professor of Computer Science
Pavlos Protopapas, Lecturer on Computational Science
Michael O. Rabin, Thomas J. Watson, Sr. Professor of Computer Science, Thomas J. Watson, Sr. Professor of Computer Science, Emeritus (on leave fall term)
Margo I. Seltzer, Herchel Smith Professor of Computer Science
Stuart M. Shieber, James O. Welch, Jr. and Virginia B. Welch Professor of Computer Science
Michael D. Smith, John H. Finley, Jr. Professor of Engineering and Applied Sciences, Dean of the Faculty of Arts and Sciences
Salil P. Vadhan, Vicky Joseph Professor of Computer Science and Applied Mathematics
Leslie G. Valiant, T. Jefferson Coolidge Professor of Computer Science and Applied Mathematics (on leave 2012-13)
James H. Waldo, Gordon McKay Professor of the Practice of Computer Science
Gu-yeon Wei, Gordon McKay Professor of Electrical Engineering and Computer Science
Woodward Yang, Gordon McKay Professor of Electrical Engineering and Computer Science (on leave 2012-13)
Todd Zickler, William and Ami Kuan Danoff Professor of Electrical Engineering and Computer Science
Jonathan L. Zittrain, Professor of Computer Science

Other Faculty Offering Instruction in Computer Science

Paul G. Bamberg, Senior Lecturer on Mathematics


Primarily for Undergraduates

For information concerning concentration in Computer Science please consult the Director of Undergraduate Studies or the Office of Student Affairs, School of Engineering and Applied Sciences, Pierce Hall 110. The Applied Mathematics and Engineering Sciences sections of the catalog should be consulted for additional courses relevant to computer science.

Computer Science 1. Great Ideas in Computer Science
Catalog Number: 6903
Henry H. Leitner
Half course (spring term). Tu., Th., 10–11:30; M., at 4. EXAM GROUP: 12, 13
An introduction to the most important discoveries and intellectual paradigms in computer science, designed for students with little or no previous background. Explores problem-solving using high and low-level programming languages; presents an integrated view of computer systems, from switching circuits up through compilers and GUI design. Examines theoretical and practical limitations related to unsolvable and intractable computational problems, and the social and ethical dilemmas presented by such issues as software unreliability and invasions of privacy.
Note: May not be taken for credit after completing Computer Science 50. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Computer Science 20. Discrete Mathematics for Computer Science
Catalog Number: 22235
Paul G. Bamberg
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Widely applicable mathematical tools for computer science, including topics from logic, set theory, combinatorics, number theory, probability theory, and graph theory. Practice in reasoning formally and proving theorems.
Note: Covers material used in Computer Science 121 and Computer Science 124. Students planning to take one of these computer science theory courses in the academic year 2012-2013 should consider taking Computer Science 20 in the spring of 2012. This course, when taken for a
letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

[*Computer Science 42. Controlling Cyberspace]*
Catalog Number: 37293 Enrollment: Limited to 10. Course application due December 9, 2011.
Jonathan L. Zittrain
Half course (spring term). M., 5:30–7:30 p.m. EXAM GROUP: 9
Why does the Internet environment exist in the form it does today? What does its future, and the future of online life in general, look like? To what extent is this future malleable? Governments, corporate intermediaries, and hackers are empowered to different degrees by the space, and their interests and strengths are often in tension. This class uses academic as well as non-traditional texts to engender a broader understanding of Internet culture and technology, with an eye towards mapping informed choices about the future.
*Note:* Permission of instructor required after submission of an application form. Offered jointly with the Law School as LAW 2433. The course will be assisted by Kendra Albert.

**Computer Science 50. Introduction to Computer Science I**
Catalog Number: 4949
David J. Malan
Half course (fall term). M., W., 1-2:30, and a weekly section. EXAM GROUP: 6, 7
Introduction to the intellectual enterprises of computer science and the art of programming. This course teaches students how to think algorithmically and solve problems efficiently. Topics include abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web development. Languages include C, PHP, and JavaScript plus SQL, CSS, and HTML. Problem sets inspired by real-world domains of biology, cryptography, finance, forensics, and gaming. Designed for concentrators and non-concentrators alike, with or without prior programming experience.
*Note:* Undergraduates may take this course Pass/Fail, and cross-registered students may take this course SAT/UNSAT. Undergraduates and cross-registered students may take this course for letter grade. GSAS students must take this course for letter grade. When taken for a letter grade, this course meets the General Education requirement for undergraduates for Empirical and Mathematical Reasoning or the Core area requirement for undergraduates for Quantitative Reasoning.

**Computer Science 51. Introduction to Computer Science II**
Catalog Number: 3411
John G. Morrisett
Half course (spring term). Tu., Th., 1-2:30, and an additional 90-minute section to be arranged. EXAM GROUP: 15, 16
Abstraction and design in computation. Topics include: Functional and object-oriented styles of programming; software engineering in the small; models of computation. Goal: understanding how to design large programs to make them readable, maintainable, efficient, and elegant. Exercises in ML and Java.
*Prerequisite:* Computer Science 50 or equivalent.
**Computer Science 61. Systems Programming and Machine Organization**  
Catalog Number: 3461  
Edward W. Kohler  
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*  
Fundamentals of computer systems programming, machine organization, and performance tuning. This course provides a solid background in systems programming and a deep understanding of low-level machine organization and design. Topics include C and assembly language programming, program optimization, memory hierarchy and caching, virtual memory and dynamic memory management, concurrency, threads, and synchronization.  
*Prerequisite:* CS50 or some experience programming in C.

*Computer Science 91r. Supervised Reading and Research*  
Catalog Number: 0361  
Steven J. Gortler  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Supervised individual study of advanced topics in computer science. A student wishing to enroll in Computer Science 91r must be accepted by a faculty member who will supervise the course work. A form available from the Student Affairs Office, Pierce Hall 110, must be filled out and signed by the student and faculty supervisor. Students writing theses may enroll in this course while conducting thesis research and writing.  
*Note:* At most two terms of Computer Science 91r may be taken for academic credit. May not be taken Pass/Fail. Students wishing more information about the range of suitable projects or faculty supervisors should consult the Director of Undergraduate Studies.

[*Computer Science 96. System Design Projects*]  
Catalog Number: 7499 Enrollment: Limited to 20.  
*Instructor to be determined*  
*Half course (spring term). M., Th., 4–6.*  
Cooperative design, development, and testing of a sizable and realistic computer system. Students work as a group with a client on a real-world open-ended problem, and gain experience in problem definition, software development, and system lifecycle issues, and in the area of application. Students work in groups; both student participation in the classroom and effective group cooperation outside the classroom are stressed.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Computer Science 51 or 61.

For Undergraduates and Graduates

*Computer Science 105. Privacy and Technology*  
Catalog Number: 9751 Enrollment: Limited to 30.  
James H. Waldo  
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 16*  
What is privacy, and how is it affected by recent developments in computer technology? Course critically examines popular concepts of privacy and uses a rigorous analysis of technologies to understand the policy and ethical issues at play. Case studies: RFID, database anonymity, research ethics, wiretapping. Course relies on some technical material, but is open and accessible
to all students, especially those with interest in economics, engineering, political science, computer science, sociology, biology, law, government, philosophy.

Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement Social Analysis.

**Computer Science 121. Introduction to the Theory of Computation**

Catalog Number: 0669
Salil P. Vadhan

_Half course (fall term). Tu., Th., 10-11:30. EXAM GROUP: 12, 13_

General introduction to the theory of computation, teaching how to reason precisely about computation and prove mathematical theorems about its capabilities and limitations. Finite automata, Turing machines, formal languages, computability, uncomputability, computational complexity, and the P vs. NP question.

*Prerequisite:* experience in formal mathematics at the level of Computer Science 20.

**Computer Science 124. Data Structures and Algorithms**

Catalog Number: 5207
Michael D. Mitzenmacher

_Half course (spring term). Tu., Th., 11:30–1; M., 8–10 p.m. EXAM GROUP: 13, 14_

Design and analysis of efficient algorithms and data structures. Algorithm design methods, graph algorithms, approximation algorithms, and randomized algorithms are covered.

*Note:* Starting in the spring of 2013, Computer Science 124 will assume background from Computer Science 20.

*Prerequisite:* Computer Science 50 or equivalent; Computer Science 51 is helpful. Some exposure to discrete applied mathematics, such as Applied Mathematics 106 or 107 or Computer Science 121 or Statistics 110, is also helpful.

**Computer Science 141. Computing Hardware**

Catalog Number: 4357
David M. Brooks

_Half course (fall term). M., W., 1-2:30, and a two-hour weekly laboratory. EXAM GROUP: 6, 7_

Introduction to the design, structure, and operation of digital computers; logic circuits and digital electronics; computer arithmetic; computer architecture; and machine language programming. Consideration of the design interactions between hardware and software systems.

*Prerequisite:* Programming experience required.

**Computer Science 143. Computer Networks**

Catalog Number: 6401
H. T. Kung

_Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7_

Principles, design, implementation, and performance of computer networks. Topics include: Internet protocols and routing, local area networks, TCP, performance analysis, congestion control, network address translation, voice and video over IP, switching and routing, mobile IP, peer-to-peer overlay networks, network security, and other current research topics. Programming assignments on protocol implementation and analysis.

*Prerequisite:* Computer Science 51.
[Computer Science 144r. Networks Design Projects]
Catalog Number: 5415
H. T. Kung

Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Cooperative design and development of advanced network-based systems with both technology and business considerations. Students will work in 2 person teams. Student work will include reading assignments, homework sets, a project proposal, and project reports and presentations. At the end of the class, all teams will defend their approaches and results in front of the class and invited guests.

Note: Expected to be given in 2013–14. Preference given to upper-class undergraduates or graduate students in computer science or in business.

Prerequisite: Computer Science 143 or equivalent experience.

Computer Science 146. Computer Architecture
Catalog Number: 99684
David M. Brooks

Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Review of the fundamental structures in modern processor design. Topics include computer organization, memory system design, pipelining, and other techniques to exploit parallelism. Emphasis on a quantitative evaluation of design alternatives and an understanding of timing issues.

Prerequisite: Computer Science 141.

*Computer Science 148. Design of VLSI Circuits and Systems
Catalog Number: 1772 Enrollment: Limited to 16.
Gu-yeon Wei

Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Presentation of concepts and techniques for the design and fabrication of VLSI systems and digital MOS integrated circuits. Topics include: basic semiconductor theory; MOS transistors and digital MOS circuits design; synchronous machines, clocking, and timing issues; high-level description and modeling of VLSI systems; synthesis and place and route design flows; and testing of VLSI circuits and systems. Various CAD tools for design, simulation, and verification are extensively used.

Note: Offered in alternate years.

Prerequisite: Computer Science 141 or permission of instructor.

Computer Science 152. Programming Languages
Catalog Number: 6841
Stephen N. Chong

Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Comprehensive introduction to the principal features and overall design of both traditional and modern programming languages, including syntax, formal semantics, abstraction mechanisms, modularity, type systems, naming, polymorphism, closures, continuations, and concurrency. Provides the intellectual tools needed to design, evaluate, choose, and use programming languages.
Prerequisite: Computer Science 51; Computer Science 121 is recommended. Students must have good programming skills, be comfortable with recursion, basic mathematical ideas and notations.

[Computer Science 153. Compilers]
Catalog Number: 2842
John G. Morrisett
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Implementation of efficient interpreters and compilers for programming languages. Associated algorithms and pragmatic issues. Emphasizes practical applications including those outside of programming languages proper. Also shows relationships to programming-language theory and design. Participants build a working compiler including lexical analysis, parsing, type checking, code generation, and register allocation. Exposure to run-time issues and optimization.
Note: Expected to be given in 2013–14.
Prerequisite: Computer Science 153.

Computer Science 161. Operating Systems
Catalog Number: 4347
Margo I. Seltzer
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Prerequisite: Computer Science 51 and 61.

[Computer Science 164. Mobile Software Engineering]
Catalog Number: 7295
David J. Malan
Half course (spring term). M., 1–3. EXAM GROUP: 6, 7
Introduction to principles of software engineering for mobile devices and best practices, including code reviews, source control, and unit tests. Topics include Ajax, encapsulation, event handling, HTTP, memory management, MVC, object-oriented design, and user experience. Languages include JavaScript, Objective-C, and PHP. Projects include mobile web apps and native iOS apps.
Note: Expected to be given in 2013–14. Students are encouraged, but not required, to have a Mac as well as an iPad, iPhone, or iPod touch; students without a Mac will have access to Macs in labs on campus. Students will work on projects in pairs; students are encouraged to enroll with a friend. Enrollment may be limited.
Prerequisite: Any three Computer Science courses numbered 50 or higher (or, with instructor’s permission, multiple years of programming experience).

[Computer Science 165. Information Management]
Catalog Number: 0560
Instructor to be determined.
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Covers the fundamental concepts of database and information management. Data models: relational, object-oriented, and other; implementation techniques of database management systems, such as indexing structures, concurrency control, recovery, and query processing; management of unstructured data; terabyte-scale databases.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Computer Science 51.

**Computer Science 171. Visualization**

Catalog Number: 8877

Hanspeter Pfister

*Half course (spring term). Tu., Th., 2:30–4, and a weekly section to be arranged. EXAM GROUP: 16, 17*

An introduction to key design principles and techniques for visualizing data. Covers design practices, data and image models, visual perception, interaction principles, tools from various fields, and applications. Introduces programming of interactive visualizations.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Prerequisite:* Students are expected to have basic programming experience (e.g., Computer Science 50).

**Computer Science 175. Computer Graphics**

Catalog Number: 3771

Steven J. Gortler

*Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8*

The computational aspects of computer graphics. Two major themes are image rendering (viewing transformations, clipping, visible-surface processing, raster algorithms, reflection models, lighting models, surface shading, antialiasing, ray tracing, radiosity, and volume rendering) and scene modeling (modeling transformations, curves and surfaces, texture mapping, data-amplification techniques, constructive solid geometry, scalar- and vector-field data, and animation). Ancillary topics include color compression, image compression, image compositing, graphical user interfaces, and special machine architectures for computer graphics.

*Prerequisite:* Computer Science 51, Applied Mathematics 21b or Mathematics 21b.

*Computer Science 179. Design of Usable Interactive Systems*

Catalog Number: 4052 Enrollment: Limited to 48.

Krzysztof Z. Gajos

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Usability and design as keys to successful technology. Covers user observation techniques, needs assessment, low and high fidelity prototyping, usability testing methods, as well as theory of human perception and performance, and design best practices. Focuses on understanding and applying the lessons of human interaction to the design of usable systems; will also look at lessons to be learned from less usable systems. The course includes several small and one large project.

**Computer Science 181. Intelligent Machines: Perception, Learning, and Uncertainty**

Catalog Number: 6454
Ryan Prescott Adams
Prerequisite: Computer Science 51, Computer Science 121, and Statistics 110.

[Computer Science 182. Intelligent Machines: Reasoning, Actions, and Plans]
Catalog Number: 0134
Radhika Nagpal
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Prerequisite: Computer Science 51; Computer Science 121 (may be taken concurrently).

Computer Science 186. Economics and Computation
Catalog Number: 87282
David C. Parkes
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
The interplay between economic thinking and computational thinking as it relates to electronic commerce, social networks, collective intelligence and networked systems. Topics covered include: game theory, peer production, reputation and recommender systems, prediction markets, crowd sourcing, network influence and dynamics, auctions and mechanisms, privacy and security, matching and allocation problems, computational social choice and behavioral game theory. Emphasis will be given to core methodologies, with students engaged in theoretical, computational and empirical exercises.
Prerequisite: Applied Math 21b, Computer Science 51 or equivalent, Statistics 110, and one of Computer Science 181, Computer Science 182, Economics 1011a, or Economics 1056.

Computer Science 187. Computational Linguistics
Catalog Number: 0249
Stuart M. Shieber
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Watson is the world Jeopardy champion. Siri responds accurately to "Should I bring an umbrella tomorrow?". How do they work? This course provides an introduction to the field of computational linguistics, the study of human language using the tools and techniques of computer science, with applications to a variety of natural-language-processing problems such as
those deployed in Watson and Siri, and covers pertinent ideas from linguistics, logic programming, and statistical modeling.

Prerequisite: Computer Science 121 or permission of the instructor.

[*Computer Science 189r. Autonomous Multi-Robot Systems]
Catalog Number: 36932 Enrollment: Limited to 15.
Radhika Nagpal
Half course (fall term). F., 1–4. EXAM GROUP: 6, 7, 8
Building autonomous robotic systems requires understanding how to make robots that observe, reason, and act. Each component uses many engineering principles: how to fuse, multiple, noisy sensors; how to balance short-term versus long-term goals; how to control one’s actions and how to coordinate with others. This year, we will study these questions in the context of a project to develop autonomous robot soccer teams. The class format will mix seminar and lab formats.

Note: Expected to be given in 2013–14. Preference will be given to students with experience in AI (e.g. CS181 or CS182 and/or robotics ES159).

Primarily for Graduates

Catalog Number: 15116 Enrollment: Limited to 10. Course application due December 9, 2011.
John G. Palfrey (Law School) and Jonathan Zittrain
Students in this experimental capstone course will work in teams to solve a series of hard problems-based cases related to cyberlaw and intellectual property.

Note: Here is the link to the application form: CS 201hf Application. Offered jointly with the Law School as 2315, and will meet at the Law School.

[*Computer Science 203hf. A Better Internet: Policy and Practice]
Catalog Number: 81745 Enrollment: Students will be selected via an application process.
Jonathan L. Zittrain
Half course (throughout the year). Fall: W., 5–7 p.m. EXAM GROUP: Fall: 9
Students will propose ideas for a better Internet, test them with stakeholders, prototype them for industries and organizations, and attack difficult implementation problems in a problem-solving capstone.

Note: Half course through the year, meeting in January at Stanford University. Offered jointly offered at Law School as LAW 2055. Here is the link to the application form: CS 203hf Application. Applications are due July 31, with admissions on a rolling basis.

Computer Science 205. Computing Foundations for Computational Science
Catalog Number: 85368
Hanspeter Pfister
Half course (fall term). Tu., Th., 2:30–4, and a weekly section to be arranged. EXAM GROUP: 16, 17
An applications course highlighting the use of computers in solving scientific problems. Students will be exposed to fundamental computer science concepts such as computer architectures, data
structures, algorithms, and parallel computing. Fundamentals of scientific computing including abstract thinking, algorithmic development, and assessment of computational approaches. Students will learn to use open source tools and libraries and apply them to data analysis, modeling, and visualization of real scientific problems. Emphasizes parallel programming and "parallel thinking."

Prerequisite: Students are expected to have basic programming experience (e.g., Computer Science 50).

**Computer Science 207. Systems Development for Computational Science**

Catalog Number: 33846  
Cristopher R. Cecka  
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4

This is a project-based course emphasizing designing, building, testing, maintaining and modifying software for scientific computing. Students will work in groups on a number of projects, ranging from small data-transformation utilities to large-scale systems. Students will learn to use a variety of tools and languages, as well as various techniques for organizing teams. Most important, students will learn to fit tools and approaches to the problem being solved. **Prerequisite:** Students are expected to have basic programming experience (Computer Science 50) and have completed Computer Science 205.

**[Computer Science 220r. Cryptography: Trust and Adversity]**

Catalog Number: 1637  
Michael O. Rabin  
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13


**[Computer Science 221. Computational Complexity]**

Catalog Number: 5812  
Michael D. Mitzenmacher  
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

A quantitative theory of the resources needed for computing and the impediments to efficient computation. The models of computation considered include ones that are finite or infinite, deterministic, randomized, quantum or nondeterministic, discrete or algebraic, sequential or parallel. **Note:** Expected to be given in 2013–14. **Prerequisite:** Computer Science 121 or equivalent.

**Computer Science 222. Algorithms at the Ends of the Wire**

Catalog Number: 2493  
Michael D. Mitzenmacher  
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

Covers topics related to algorithms for big data, especially related to networks. Themes include
compression, cryptography, coding, and information retrieval related to the World Wide Web.
Requires a major final project.
Prerequisite: Computer Science 124.

[Computer Science 223. Probabilistic Analysis and Algorithms]
Catalog Number: 4740
Michael D. Mitzenmacher
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Probabilistic techniques and tools for the design and analysis of algorithms. Designed for all
first-year graduate students in all areas.
Note: Expected to be given in 2013–14.
Prerequisite: Computer Science 124. Preferably additional probability, such as in Computer
Science 226r, Statistics 110, or Mathematics 191.

[Computer Science 225. Pseudorandomness]
Catalog Number: 4869
Salil P. Vadhan
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Efficiently generating objects that “look random” despite being constructed using little or no
randomness. Connections and applications to computational complexity, cryptography, and
combinatorics. Pseudorandom generators, randomness extractors, expander graphs, error-
correcting codes, hash functions.
Prerequisite: Exposure to randomized algorithms (as in Computer Science 124), computational
complexity (as in Computer Science 121), and algebra (as in Applied Mathematics 106,
Mathematics 123, or Computer Science 226r).

[Computer Science 226r. Efficient Algorithms]
Catalog Number: 1749
Instructor to be determined
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Important algorithms and their real life applications. Topics include combinatorics, string
matching, wavelets, FFT, computational algebra number theory and geometry, randomized
algorithms, search engines, page rankings, maximal flows, error correcting codes, cryptography,
parallel algorithms.
Note: Expected to be given in 2013–14.

[Computer Science 228. Computational Learning Theory]
Catalog Number: 0364
Leslie G. Valiant
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Possibilities of and limitations to performing learning by computational agents. Topics include
computational models, polynomial time learnability, learning from examples and learning from
queries to oracles. Applications to Boolean functions, automata and geometric functions.
Note: Expected to be given in 2013–14.
Prerequisite: Computer Science 121 or equivalent.
**Computer Science 229r. Topics in the Theory of Computation**
Catalog Number: 3730  
Salil P. Vadhan  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
Current research directions in theoretical computer science. Topic for Spring 2013: Mathematical Approaches to Data Privacy.  
*Prerequisite:* comfort with rigorous mathematics, discrete probability, and reasoning about algorithms (e.g. as in CS 124).

**Computer Science 244r. Networks Design Projects**
Catalog Number: 3018  
H. T. Kung  
*Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8*
The contents and course requirements are similar to those of Computer Science 144r, with the exception that students enrolled in Computer Science 244r are expected to do substantial system implementation and perform graduate-level work.  
*Note:* Expected to be given in 2013–14. Preference given to upper-class undergraduates or graduate students in computer science or in business who are proficient in computer programming or in business software.  
*Prerequisite:* Computer Science 143 or equivalent experience.

**Computer Science 246. Advanced Computer Architecture**
Catalog Number: 0979  
David M. Brooks  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
The contents and course requirements are similar to those of Computer Science 146, with the exception that students enrolled in Computer Science 246 are expected to undertake a substantial course project.  
*Prerequisite:* Computer Science 141.

**Computer Science 247r. Advanced Topics in Computer Architecture**
Catalog Number: 48162  
David M. Brooks  
*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*
Seminar course exploring recent research in computer architecture. Topics vary from year to year and will include subjects such as multi-core architectures, energy-efficient computing, reliable computing, and the interactions of these issues with system software. Students read and present research papers, undertake a research project.  
*Prerequisite:* Computer Science 146 or 246 or permission of the instructor.

**Computer Science 248. Advanced Design of VLSI Circuits and Systems**
Catalog Number: 7191 Enrollment: Limited to 16.  
Gu-yeon Wei  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
The contents and course requirements are similar to those of Computer Science 148, with the exception that students enrolled in Computer Science 248 are expected to do a substantial design
project and paper discussions on advanced topics.  
*Note:* Offered in alternate years.  
*Prerequisite:* Computer Science 141 or permission of instructor.

**Computer Science 252r. Advanced Topics in Programming Languages**  
Catalog Number: 1986  
*John G. Morrisett*  
Half course (fall term). M., W., F., at 3. EXAM GROUP: 8  
Seminar course exploring recent research in programming languages. Topics vary from year to year. Students read and present research papers, undertake a research project.  
*Prerequisite:* Computer Science 152 or permission of the instructor.

**[Computer Science 253r. Virtual Machines]**  
Catalog Number: 2901  
Instructor to be determined.  
Half course (fall term). M., F., 1–2:30. EXAM GROUP: 6, 7  
*Note:* Preference given to graduate students or upper-class concentrators.  
*Prerequisite:* Computer Science 153 or equivalent.

**[Computer Science 261. Research Topics in Operating Systems]**  
Catalog Number: 6706  
*Edward W. Kohler*  
Half course (fall term). Tu., Th., 1–2:30.  
A quantitative approach to operating system design and evaluation. Discussion of recent research including extensible operating system architectures, distributed systems, and performance analysis. Overview of research techniques and methodology.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Computer Science 161, or equivalent.

**[Computer Science 262. Introduction to Distributed Computing]**  
Catalog Number: 7949  
*James H. Waldo*  
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17  
Examination of the special problems associated with distributed computing such as partial failure, lack of global knowledge and protocols that function in the face of these problems. Emphasis on causal ordering, event and RPC-based systems.  
*Prerequisite:* Computer Science 161 or permission of instructor.

**[Computer Science 264. Massively Parallel Computing]**  
Catalog Number: 37157  
Instructor to be determined.  
Half course (spring term). M., W., F., 1–2:30. EXAM GROUP: 6, 7  
This course is an introduction to several modern parallel computing approaches and languages. Covers programming models, hardware architectures, multi-threaded programming, GPU programming with CUDA, cluster computing with MPI, cloud computing, and map-reduce using
Hadoop and Amazon’s EC2. Students will complete readings, programming assignments, and a final project.

[Computer Science 265. Database Systems]
Catalog Number: 2083
Instructor to be determined.
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
A research-oriented introduction to Database Management systems. First third covers database design, implementation, and use. Topics include: network, relational, and object oriented database models, system architectures, transaction processing, system implementation, and SQL. Remaining two-thirds address research literature surrounding database systems, including an historical perspective, the emergence of relational and object-oriented systems, concurrency control, and distributed systems. Students will be expected to undertake a final research project.
Prerequisite: CS 165 or permission of instructor.

[*Computer Science 266. Biologically-Inspired Distributed and Multi-Agent Systems]
Catalog Number: 0766 Enrollment: Limited to 20.
Radhika Nagpal
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Surveys biologically-inspired approaches to designing distributed systems. Focus is on algorithms, analysis, and programming paradigms. Topics: swarm intelligence, amorphous computing, immune-inspired systems, synthetic biology. Discussion of research papers and a research project required.
Note: Geared toward graduate students of all levels as well as advanced undergraduates. Preference given to graduate students or upper-level concentrators.
Prerequisite: Experience with algorithms (e.g. Computer Science 124) and programming (e.g. Computer Science 51).

Catalog Number: 3067
Steven J. Gortler
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Advanced seminar in computer graphics focusing on geometric representations and processing. Topics include: direct manipulation, implicit surfaces, spline presentations, recursively subdivided surfaces, model simplification, surface parameterization and processing, mesh generation, and motion capture processing.
Prerequisite: Computer Science 175.

[Computer Science 278. Rendering and Image Processing in Computer Graphics]
Catalog Number: 4883
Steven J. Gortler
Half course (spring term). M., W., 4–5:30. EXAM GROUP: 9
Advanced course in computer graphics focusing on image rendering and processing. Topics include: light transport, efficient rendering, image based rendering, texture processing, interactive image processing.
Prerequisite: Computer Science 175 or permission of instructor.
*Computer Science 279 (formerly *Computer Science 279r). Research Topics in Human-Computer Interaction*

Catalog Number: 1435

Krzysztof Z. Gajos

Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13

Current topics in HCI research, including intelligent interactive systems, usable privacy and security, interaction techniques, design methods, design for emerging markets. Special focus this year is on human computation and crowdsourcing. The course covers core research methods in HCI including experimental design, statistical data analysis, and qualitative methods. Activities will include discussion of primary literature, lectures, assignments, and a research project. Designed for first year grads from all areas. Advanced undergrads welcome.

*Prerequisite:* None for graduate students; CS 179 strongly recommended for undergraduates.

Computer Science 280r. Advanced Topics in Artificial Intelligence *(New Course)*

Catalog Number: 11199

Barbara J. Grosz

Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

Seminar course exploring research directions in artificial intelligence (AI), typically combining two or more of such areas as multi-agent systems, natural-language processing, machine learning, reasoning under uncertainty, representation systems. Topic for Spring 2013: AI techniques to support improved health care information technology.

*Prerequisite:* Computer Science 181 or 182, or equivalents; or permission of instructor.

Computer Science 281. Advanced Machine Learning

Catalog Number: 97848

Ryan Prescott Adams

Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16

Advanced statistical machine learning and probabilistic data analysis. Topics include: Markov chain Monte Carlo, variational inference, Bayesian nonparametrics, text topic modeling, unsupervised learning, dimensionality reduction and visualization. Requires a major final project.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Students should feel comfortable with basic linear algebra and probability theory. Students will be expected to implement algorithms in a programming language such as Matlab, Python or R.

Computer Science 283. Computer Vision

Catalog Number: 4475

Todd Zickler

Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

Vision as an ill-posed inverse problem: image formation, two-dimensional signal processing; image enhancement and restoration; feature analysis; image segmentation; structure from motion, texture, and shading; multiple view geometry; pattern classification; and applications.

Computer Science 285. Multi-Agent Systems

Catalog Number: 1060
David C. Parkes  
**Half course (fall term). Tu., Th., 11:30–1.**  
Algorithmic, game-theoretic and logical foundations of multi-agent systems, including distributed optimization and problem solving, non-cooperative game theory, learning and teaching, communication, social choice, mechanism design, auctions, negotiation, coalitional game theory, logics of knowledge and belief, collaborative plans and social systems.  
*Prerequisite:* Computer Science 181 or 182, or permission of instructor.

**Computer Science 286r. Topics at the Interface between Computer Science and Economics**  
Catalog Number: 1099 Enrollment: Limited to 20.  
Yiling Chen  
**Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7**  
Interplay between computation and economics. Topics in electronic commerce, computational social choice, computational mechanism design, peer production, prediction markets and reputation systems. Readings in AI, theoretical CS, multi-agent systems, economic theory, and operations research.  
*Prerequisite:* Mathematics 21b, Applied Mathematics 21b, or equivalent; Computer Science 124, and 181 or 182, or equivalents; or permission of instructor.

[Computer Science 287r. Natural Language Processing]  
Catalog Number: 3306  
Stuart M. Shieber  
**Half course (spring term). Tu., Th., 2:30–4.**  
In-depth investigation of natural-language-processing techniques. Topics include: finite-state, context-free, and trans-context-free formalisms, syntactic analysis, semantic interpretation, weighted automata and transducers. Students discuss research papers and undertake a significant research project.  
*Prerequisite:* Computer Science 187 or permission of instructor.

**Computer Science 299r. Special Topics in Computer Science**  
Catalog Number: 4592  
Michael D. Mitzenmacher  
**Half course (fall term; repeated spring term). Hours to be arranged.**  
Supervision of experimental or theoretical research on acceptable computer science problems and supervision of reading on topics not covered by regular courses of instruction.  
*Note:* Open to graduate students and AB/SM candidates only. Students must arrange such work with a member of the School of Engineering and Applied Sciences. This course is graded and is ordinarily taken with the approval of the Committee on Higher Degrees. Applicants must file a project sheet before study cards are filed. Project sheets may be obtained from the Academic Office, Pierce Hall 110.

**Graduate Courses of Reading and Research**  
Reading courses are odd-numbered; research courses are even-numbered.

[*Computer Science 301qc. iLaw: Internet Technology, Law, and Policy]*
Catalog Number: 65515
Yochai Benkler (Law School), Terry Fisher (Law School), Urs Gasser (Law School), Lawrence Lessig (Law School), Phil Malone (Law School), Charles Nesson (Law School), John Palfrey (Law School), and Jonathan Zittrain
Quarter course (fall term). Hours to be arranged.
Internet Technology, Law, and Policy. Intensive four-day course on the current state of the Internet, its problems, and its path. Privacy, property, speech, and governance. A rigorous survey course with a final work product required of students.

*Computer Science 303,304. Statistical Machine Learning
Catalog Number: 46531,61638
Ryan Prescott Adams 3022

*Computer Science 305,306. Readable, Extensible, High-Performance Software Systems - (New Course)
Catalog Number: 15739,17423
Edward W. Kohler 1996

*Computer Science 307,308. Biologically-Inspired Multi-Agent Systems, Distributed Systems, and Computational Biology
Catalog Number: 8289,8308
Radhika Nagpal 5068 (on leave 2012-13)

*Computer Science 309,310. Computational Mechanism Design, Electronic Marketplaces, and Multi-Agent Systems
Catalog Number: 8764,0931
David C. Parkes 4202 (on leave fall term)

*Computer Science 311,312. Collaborative Systems, AI Planning, and Natural Language Processing
Catalog Number: 4677,6223
Barbara J. Grosz 1599

*Computer Science 313,314. Visual Computing
Catalog Number: 4273,1628
Hanspeter Pfister 5882

Catalog Number: 2892,2433
Yiling Chen 6187

*Computer Science 321,322. Databases, Operating System, and Software Design
Catalog Number: 4085,4086
Margo I. Seltzer 3371
*Computer Science 323,324. Human-Computer Communication through Natural, Graphical, and Artificial Languages
Catalog Number: 2450,2453
Stuart M. Shieber 2456

*Computer Science 325,326. Intelligent Interactive Systems and Human-Computer
Catalog Number: 15849,82478
Krzysztof Z. Gajos 6339

*Computer Science 327,328. Mathematical Logic, Theory of Computation
Catalog Number: 1160,3576
Harry R. Lewis 4455 (on leave 2012-13)

*Computer Science 343,344. Computer Architecture: Modeling and Design
Catalog Number: 3932,9266
David M. Brooks 4222

*Computer Science 345,346. High-Performance Computer Systems
Catalog Number: 6154,6156
Michael D. Smith 3372

*Computer Science 347,348. Computer Vision
Catalog Number: 1882,8831
Todd Zickler 5143

*Computer Science 351,352. Cryptography: Unbreakable Codes and Financial Cryptography
Catalog Number: 0218,0255
Michael O. Rabin 7003 (on leave fall term)

*Computer Science 355,356. Computational Complexity, Parallel Computation, Computational Learning, Neural Computation
Catalog Number: 0345,0346
Leslie G. Valiant 7396 (on leave 2012-13)

*Computer Science 357,358. Computational Complexity, Cryptography, and Pseudorandomness
Catalog Number: 3485,8641
Salil P. Vadhan 3833

*Computer Science 359,360. On-line Algorithms and Randomized Algorithms
Catalog Number: 2104,1477
Michael D. Mitzenmacher 7748
*Computer Science 361,362. Programming Languages and Semantics  
Catalog Number: 8672,8366  
*John G. Morrisett 4853

*Computer Science 363,364. Programming Languages and Security  
Catalog Number: 52264,67371  
*Stephen N. Chong 6340

*Computer Science 365. SEAS Teaching Practicum  
Catalog Number: 8195  
*John Andrew Girash 6894  
Gain effective skills for teaching applied sciences. Topics: presentation and communication, lesson planning, classroom practice, office hours and 1-on-1 interactions, feedback, assessment, and working with course staff. Seminar style with an emphasis on observation, practice, feedback, discussion, and reflection.

*Computer Science 375,376. Computer Graphics  
Catalog Number: 6832,7313  
*Steven J. Gortler 2824

Cross-listed Courses

- MCB 131. Computational Neuroscience
- Statistics 221. Statistical Computing and Visualization
- *Statistics 285r. Statistical Machine Learning

Dramatic Arts

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Dramatics

Martin Puchner, Byron and Anita Wien Professor of Drama and of English and Comparative Literature  
Daniel Albright, Ernest Bernbaum Professor of Literature  
Julie A. Buckler, Professor of Slavic Languages and Literatures, Harvard College Professor  
Deborah D. Foster, Senior Lecturer on Folklore and Mythology  
Marjorie Garber, William R. Kenan, Jr. Professor of English and of Visual and Environmental
Studies
Jorie Graham, Boylston Professor of Rhetoric and Oratory (on leave fall term)
Sylvaine Guyot, Assistant Professor of Romance Languages and Literatures (on leave 2012-13)
Jill Johnson, Senior Lecturer on Music and Director of Dance (on leave fall term)
Ju Yon Kim, Assistant Professor of English
Ryan Scott McKittrick, Lecturer on Dramatics Arts (fall term) and Dramaturg of the American Repertory Theater
John C. Megan, Director of the Office for the Arts at Harvard (ex officio)
Carol J. Oja, William Powell Mason Professor of Music (on leave 2012-13)
Diane Paulus, Professor of the Practice of Theatre and Artistic Director of the American Repertory Theater (ex officio)
Robert Scanlan, Professor of the Practice of Theatre (on leave fall term)
Elaine Scarry, Walter M. Cabot Professor of Aesthetics and the General Theory of Value, Harvard College Professor
Oliver Simons, Associate Professor of Germanic Languages and Literatures (on leave fall term)
Marcus Stern, Lecturer on Dramatic Arts and Associate Director of the American Repertory Theater (ex officio)
Susan R. Suleiman, C. Douglas Dillon Professor of the Civilization of France and Professor of Comparative Literature (on leave fall term)
Scott Zigler, Director of the American Repertory Theater Institute for Advanced Theater Training

Other Faculty Offering Instruction in Dramatics
Remo Francisco Airaldi, Lecturer on Dramatic Arts
Bryonn Rolly Bain, Visiting Lecturer on Dramatic Arts
Thomas Derrah, Lecturer on Dramatic Arts
Jeremy Geidt, Lecturer on Dramatic Arts
J. Michael Griggs, Lecturer on Dramatic Arts
Adrienne Krstansky, Visiting Assistant Professor of Dramatic Arts
Nancy K. Houfek, Lecturer on Dramatic Arts
Karen L. MacDonald, Lecturer on Dramatic Arts
Shira Milikowsky, Lecturer on Dramatic Arts
Molly B. Pearson, Visiting Lecturer on Dramatic Arts
Annalisa Sacchi, Lecturer on Dramatic Arts

For Undergraduates and Graduates

[Dramatic Arts 101. Introduction to Theatre]
Catalog Number: 0845
Scott Zigler
Half course (fall term). Hours to be arranged.
An introduction and overview of the major creative elements in professional theater including: acting, directing, playwriting, and designing. Special attention given to productions by the American Repertory Theater (A.R.T.), the A.R.T. Institute and other productions in the Boston area. Students have the opportunity to attend and analyze at least five different productions and
to engage in creative work throughout the term. Additionally, theater professionals from the A.R.T. give guest lectures in their areas of expertise.

*Note:* Expected to be given in 2013–14.

**Dramatic Arts 105. Production Dramaturgy: A.R.T. 2012-13 Season**
Catalog Number: 7592 Enrollment: Limited to 12.
Ryan Scott McKittrick
Half course (fall term). W., 1:10–3:10. EXAM GROUP: 6, 7, 8
In this course, students will learn about the roles and responsibilities of a dramaturg in the rehearsal room and in a theater company. Focusing on productions in the American Repertory Theater’s 2012-13 season, students will study and evaluate scripts and performances on the A.R.T. stages. By exploring the performance histories, translations, and dramatic structures of the plays and musicals, students will go through the steps a dramaturg takes to prepare for a production. In addition, students will read and evaluate new scripts submitted to the A.R.T. and the A.R.T. Institute. As a final project, each student will use the Harvard Theater Collection to research a play, opera, or musical of his or her choice and prepare a short presentation for the class.

**Dramatic Arts 110. Beginning Acting**
Catalog Number: 3321 Enrollment: Limited to 20.
Thomas Derrah
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
An exploration of the basic techniques of acting, beginning with exercises that flex the imagination and heighten observation; the course will then move towards work on rhythm, an actor’s instincts, focus, concentration, and character with an ongoing emphasis in improvisation. The texts of Anton Chekhov will be used as a point of reference for the work. The latter part of the course will concentrate on selected scene study from Chekhov’s major plays.

*Note:* Enrollment determined by audition. Students will audition for the course with a short improvisation described by the professor at the first class meeting.

**Dramatic Arts 110a. Acting Lab: The Fusion of Intellect and Imagination for the Stage**
Catalog Number: 35526 Enrollment: Limited to 20.
Thomas Derrah
Half course (fall term). Hours to be arranged.
Following guidelines without a prescribed text, students will work on physical and vocal invention, exploring the many ways and styles in which dynamic and compelling stories can be told. In this course, we will aim to heighten imagination and observation, build confidence, and enhance extemporaneous speech and thought through exercises, exploring impulses, and imaginative courage. Techniques used will include both individual and group activities, Grotowski exercises, mask work, and classical commedia dell’arte.

*Note:* Expected to be given in 2013–14. Enrollment determined by audition. Students will audition for the course with a short improvisation described by the professor at the first class meeting.

**Dramatic Arts 111. Acting: 20th Century Texts**
Catalog Number: 9738
Karen L. MacDonald
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An expansion of basic acting techniques, with an emphasis on the actor’s work done during rehearsal: creating a character, building a role and finding one’s own way of preparing for and making the most of rehearsal time. Actors will use exercises and improvs to help explore character and sharpen instincts, and do monologue and scene work using contemporary texts, both comic and dramatic.
Note: Enrollment determined by audition.

[*Dramatic Arts 112r. Advanced Acting: 20th-Century Texts]*
Catalog Number: 8011
Marcus Stern
Half course (fall term). Hours to be arranged.
For actors interested in working in television, film and theater, this is a course of advanced acting techniques using 20th-century dramatic texts for scene work. The emphasis is on action based acting and the creation of an acting process that is specifically tailored to the individual actor. Includes character work -- making physical and vocal changes. Emphasis also on learning how to audition better, includes helping actors assemble a group of working monologues to use in auditions.
Note: Expected to be given in 2013–14. Enrollment determined by audition on the first day of class.

*Dramatic Arts 114. Practical Aesthetics*
Catalog Number: 8994 Enrollment: Limited to 16.
Scott Zigler
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Practical Aesthetics Acting Technique was developed by playwright David Mamet and actor William H. Macy, based on the work of the American acting teacher Sanford Meisner and the Russian acting teacher Konstantin Stanislavski. In this course, students will focus on rigorous text analysis combined with emphasis on enhancing the actor’s spontaneity through training in Meisner’s "Repetition Exercise." Students will do scene work drawn from a wide selection of plays.
Note: Enrollment will be determined by lottery at the first class meeting.
Prerequisite: Dramatic Arts course in Acting, previous study in Practical Aesthetics, or extensive undergraduate performance experience.

*Dramatic Arts 115. Acting Shakespeare*
Catalog Number: 6659 Enrollment: Limited to 20.
Jeremy Geidt
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Investigation of the texts of Shakespeare as theatre, developing an American approach to verse speaking and character analysis. Scenes are rehearsed to interpret the verse and prose by the light of modern experience. Explores the imagination of the playwright in order to develop the imagination of the student.
**[Dramatic Arts 116. Acting Workshop: Comedy]**
Catalog Number: 9926 Enrollment: Limited to 16.
*William S. Lebow*

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

A course developing the actor’s approach to and playing of comedy and humor. Using characters and scenes from Shakespeare, Molière, Shaw, and contemporary writers from Christopher Durang to Steve Martin, the course focuses on the universality of comic technique and the specific demands of comic playing. The question of humor is explored with respect to dramatic situations and characters that are inherently serious. Student scenes will occasionally be critiqued by members of the A.R.T. Company.

*Note:* Expected to be given in 2013–14. Enrollment determined by audition on the first day of class. Students are asked to prepare a 30 second comic monologue, classical or contemporary, for the audition.

**[Dramatic Arts 117. Acting Chekhov]**
Catalog Number: 1465 Enrollment: Limited to 14.
*Remo Francisco Airaldi*

*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*

An exploration of Chekhov’s plays from an actor’s point of view in order to develop a practical approach to any dramatic text. We will balance the use of analytical skills - playable actions, active verbs, subtext and beats - with the need to free the actor’s creative imagination, through exercises and improvisations. A variety of acting techniques will be used in scene work from the plays, including the techniques of Stanislavski, Michael Chekhov, Strasberg, Adler and Meisner as well as non-text-based approaches.

*Note:* Expected to be given in 2013–14. Enrollment determined by audition. Each student will be asked to read a selection from one of Chekhov’s plays. No memorization required.

**[Dramatic Arts 118. Acting Alone: The Monologue - (New Course)]**
Catalog Number: 18309 Enrollment: Limited to 14.
*Remo Francisco Airaldi*

*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*

The analysis, rehearsal and performance of theatrical monologues. The ability to work on a monologue, whether in the context of a play or as an audition piece, is a foundational skill for all actors. We will begin with work on classical monologues and then move on to contemporary material. We will study specific techniques to help students "act alone" creatively, honestly and spontaneously. Students will also learn how to choose, prepare and perform a monologue under the specific pressures of an audition.

**[Dramatic Arts 119. Vocal Production for the Stage]**
Catalog Number: 8900 Enrollment: Limited to 18.
*Nancy K. Houfek*

*Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16*

Whether one is performing in a play, speaking professionally, teaching a class or leading a group, the ability to use one’s voice effectively is a primary element of the success of the presentation. Using several major techniques of speaking training, students learn not only how to use the voice, but how these various approaches to voice training correspond to specific
2012-2013 Previous Courses of Instruction

Note: Enrollment determined by interview.

[Dramatic Arts 120. Introduction to Choreography]
Catalog Number: 2983
Instructor to be determined
Half course (fall term). Hours to be arranged.
This introductory choreography course utilizes movement exploration to tap into the participant’s aesthetic and interpretive skills as they are challenged to make dances. Explorations into the use of time, weight and space inform their creative process. Through a combination of readings, writings, discussions, videos and dance improvisation, the course focuses on how movement choices develop dances that are kinesthetic, dramatic, and artistic for both the performer and the audience. No previous dance experience necessary.
Note: Expected to be given in 2013–14. Enrollment determined by interview during the first week of class.

*Dramatic Arts 130r (formerly *Dramatic Arts 130). Directing
Catalog Number: 8160 Enrollment: Limited to 9.
Marcus Stern
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
A directing class for directors interested in theater, television and film, as well as for actors, dramaturgs, and designers investigating all aspects of theater. The class accommodates beginning to advanced levels of work. Students may bring in video or film scenes as part of the class work. Through constant scene work the course examines the directorial tools of text analysis, staging, design, and working with actors. The focus is on how to tell a story clearly and effectively.
Note: Enrollment determined by short interviews to be conducted on the first day of class.

*Dramatic Arts 131. Directing Lab
Catalog Number: 50633 Enrollment: Limited to 12. Enrollment determined by short interview to be conducted on the first day of class.
Shira Milikowsky
Half course (spring term). M., 4–6. EXAM GROUP: 9
This class is designed for students interested in expanding their understanding of directing for theater. The course will focus on the work of American experimental theater artists from the 1960’s to the present, examining the various ways avant-garde directors and ensembles have experimented with form to seek out radical new modes of storytelling. Students will create work inspired by the artists and productions studied, applying theory to practice in rehearsals and presentations.

Dramatic Arts 132. Directing Contemporary Drama and the American Musical: Pippin, a Case Study - (New Course)
Catalog Number: 84938
Diane Paulus and Marcus Stern
Half course (fall term). Tu., 4–6. EXAM GROUP: 18
A great opportunity for undergraduate directors to explore the musical Pippin with A.R.T.’s
Artistic Director Diane Paulus as she develops the professional A.R.T. production for the Loeb Drama Center mainstage, as well as the chance to learn vivid directorial story-telling techniques from resident A.R.T. director Marcus Stern. The class will consist of a unit of core directing tools in the context of contemporary drama, and will culminate with student presentations of excerpts from Pippin.

*Dramatic Arts 135. Design for the Theatre: History and Practice*
Catalog Number: 9503 Enrollment: Limited to 12.
J. Michael Griggs
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*
The practice of designing scenery for the theatre is explored through the history of stage design and the architecture of the theater building. Students complete projects of research and design for plays from various periods. The projects will introduce basic techniques in drawing, drafting, and model making. No previous experience in design or art necessary.

*Dramatic Arts 136. Designing for the Stage*
Catalog Number: 1116 Enrollment: Limited to 12.
J. Michael Griggs
*Half course (spring term). Tu., Th., 1–3. EXAM GROUP: 15, 16*
Students prepare and present for criticism stage design projects based on play texts that suggest varying interpretive and stylistic problems. Focus is on examining ideas through research of visual material and analysis of text. Through their design projects, students also complete assignments in perspective drawing, drafting, model making, and lighting design. No previous experience in design or art necessary.

*Dramatic Arts 165x. The Collaborative Process - (New Course)*
Catalog Number: 33416 Enrollment: Limited to 20.
Adrianne Krstansky
*Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18*
An exploration of the process of collaborative creation from the idea to performance. Students work as performers, directors, writers, and designers to create original theater pieces based on current events, literature, theater, genres, and personal obsessions. Students will engage in writing exercises geared towards generating material for their collaborative performance. There will be writing workshop sessions. This class will also train students in Viewpoint Technique, a highly physical method of creating theater that awakens in students the value of ensemble and kinesthetic response. Students will participate in exercises that teach them how to articulate elements of Time and Space onstage, such as Spatial Relationship, Tempo, Kinesthetic Response, Gesture, Architecture, Repetition, Topography and Floor Pattern.

*Dramatic Arts 166x. Producing New Work for the American Stage - (New Course)*
Catalog Number: 48523
Molly B. Pearson
*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*
This course will demystify exactly what it is a producer does; empowering all theater artists (actors, writers, directors - not just those who currently self identify as producers) to produce or self-produce new work. Using case studies from contemporary theater as inspiration, students
will: identify a new play to produce and devise a plan for creative development, build a business plan, budget, fundraising strategy, and a PR and marketing plan. Arts entrepreneurs are not born - rather, they are self-made. Over the course of the semester, students will develop both the skill set and the vocabulary needed to champion great new works of the American theater and bring them to the stage.

*Dramatic Arts 167x. Hip Hop and Spoken Word: Theater Performance Laboratory - (New Course)
Catalog Number: 12108 Enrollment: Limited to 20. Audition, see note.
Bryonn Rolly Bain
Half course (fall term). F., 12–3. EXAM GROUP: 5, 6, 7
From Gil Scott-Heron, Sonia Sanchez and the Last Poets, to Slick Rick, Suheir Hammad and Public Enemy; from Amiri Baraka, Saul Williams and Nikki Giovanni, to Jay Z, Dead Prez, Immortal Technique and Nicki Minaj. Poets continue building new worlds with the Word. In this course, workshop verse for page and stage. Research, write, record, produce and perform your own work, while critically examining texts from the Harlem Renaissance, Black Arts Movement and Hip Hop Generation.
Note: Students will audition by reading/performing an original or "classic" of their choice, 5 minutes max, at first class meeting during shopping period. Early admission videos accepted: www.LyricsfromLockdown.com.

Dramatic Arts 168x. Contemporary Theatre in Europe - (New Course)
Catalog Number: 71934
Annalisa Sacchi
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
The purpose of this class concerns with an aesthetic and political understanding of Contemporary Theatre in Europe. We will touch on a number of issues via artists’ materials as well as theoretical and historical texts, with the goal of understanding the role of tradition and the impact of the modernist idea of revolution within the field of director’s theatre today. Experiences in group theatre and collective creation will be analysed as well. The course looks at specific examples about some of the most interesting and radical theatre currently being made in Europe, presenting them as instances of cultural production, affective experiences and modes of re-activating the archive of past events.

Cross-listed Courses

Aesthetic and Interpretive Understanding 24 (formerly Literature and Arts B-51). First Nights: Five Performance Premieres
[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]
[Aesthetic and Interpretive Understanding 31 (formerly Literature and Arts B-85). American Musicals and American Culture]
Aesthetic and Interpretive Understanding 34. Interpretation: Artful Reading of Page, Stage, and Screen
Aesthetic and Interpretive Understanding 55 (formerly Literature and Arts A-40). Shakespeare, The Early Plays - (New Course)
[African and African American Studies 111. Spectral Fictions, Savage Phantasms: Race and Gender in Anti-Racist South African and African American Drama, Fiction and Film]

[African and African American Studies 120x. African American Theatre, Drama, and Performance - (New Course)]

[African and African American Studies 142. Hiphop and Don’t Stop: Education and Know-the-Ledge]

[Comparative Literature 260. Renaissance and Baroque Drama]

[Culture and Belief 56 (formerly English 193a). The Culture of Capitalism - (New Course)]

*English Calr. Dramatic Screenwriting II: Workshop

*English Camr. Intermediate Playwriting: Workshop

*English Ckr. Introduction to Playwriting: Workshop

*English Clr. Dramatic Screenwriting I: Workshop

*English 90ac. Cut Tongue Theaters: Asian American and Chicana/o Playwrights: Seminar - (New Course)

*English 90hb. Four Shakespeare Plays: Seminar

*English 90me. Medieval English Drama: Seminar - (New Course)

*English 90sb. Samuel Beckett’s Plays and Prose: Seminar

English 182a. American Drama: 1787 to the Present

English 192. Political Theatre and the Structure of Drama

English 221 (formerly English 116). Repetition and Revenge: Graduate Seminar

*English 261. Joyce/Beckett: Graduate Seminar - (New Course)

*Folklore and Mythology 114. Embodied Expression/Expressive Body: Dance in Cultural Context

[*French 61a. Classicism and Modernity: An Introduction to Performance]

French 90t. Writing and Re-Writing French Theater - (New Course)


*Freshman Seminar 30l. George Balanchine: Russian-American Master

*Freshman Seminar 33x. Complexity in Works of Art: Ulysses and Hamlet

*Freshman Seminar 35n. The Art and Craft of Acting

*Freshman Seminar 35s. Movement and Meaning: Dance, Culture, and Identity in the 20th Century

German 50. German Drama and Theater

[German 115. German Comedy]

Italian 40. Advanced Oral Expression. Ciak, si parla!

[Literature 141. Comparative Modern Anglophone Drama - A Seminar on Genealogy]

Modern Greek 104. Modern Greek Theatre - (New Course)

[Music 101r. Dance Collaboration]


*Music 105r. Fundaments of Improvisation & Composition: Dance

Music 192r. Topics in Music from 1600–1800: Proseminar

Music 217r. 19th-Century Music: Seminar

[Scandinavian 142. Nordic Theater and Drama]

Slavic 141. Russian Drama and Performance - (New Course)
Earth and Planetary Sciences

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Earth and Planetary Sciences

John H. Shaw, Harry C. Dudley Professor of Structural and Economic Geology, Harvard College Professor (Chair)
James G. Anderson, Philip S. Weld Professor of Atmospheric Chemistry
Jeremy Bloxham, Mallinckrodt Professor of Geophysics, Dean of Science
Brian F. Farrell, Robert P. Burden Professor of Meteorology
Peter John Huybers, Professor of Earth and Planetary Sciences (on leave 2012-13)
Miaki Ishii, Associate Professor of Earth and Planetary Sciences
Daniel J. Jacob, Vasco McCoy Family Professor of Atmospheric Chemistry and Environmental Engineering
Stein B. Jacobsen, Professor of Geochemistry
Hillary S. Jenkins, Preceptor in Earth and Planetary Sciences
David T. Johnston, Assistant Professor of Earth and Planetary Sciences
Andrew H. Knoll, Fisher Professor of Natural History and Professor of Earth and Planetary Sciences
Zhiming Kuang, Gordon McKay Professor of Atmospheric and Environmental Science
Charles H. Langmuir, Higgins Professor of Geochemistry
Francis Alexander Macdonald, Assistant Professor of Earth and Planetary Sciences
Scot T. Martin, Gordon McKay Professor of Environmental Chemistry
James J. McCarthy, Professor of Biological Oceanography and Alexander Agassiz Professor of Biological Oceanography
Michael B. McElroy, Gilbert Butler Professor of Environmental Studies
Brendan J. Meade, Associate Professor of Earth and Planetary Sciences
Jerry X. Mitrovica, Professor of Geophysics
Sujoy Mukhopadhyay, Associate Professor of Geochemistry (Co-Director of Graduate Studies)
Richard J. O’Connell, Professor of Geophysics (on leave spring term)
Ann Pearson, Murray and Martha Ross Professor of Environmental Sciences (Co-Head Tutor)
James R. Rice, Mallinckrodt Professor of Engineering Sciences and Geophysics (on leave fall term)
Daniel P. Schrag, Sturgis Hooper Professor of Geology and Professor of Environmental Science and Engineering
Sarah Stewart-Mukhopadhyay, Professor of Earth and Planetary Sciences (Co-Head Tutor)
Eli Tziperman, Pamela and Vasco McCoy, Jr. Professor of Oceanography and Applied Physics (Co-Director of Graduate Studies)
Steven C. Wofsy, Abbott Lawrence Rotch Professor of Atmospheric and Environmental Science, Area Dean for Environmental Science and Engineering
Carl Wunsch, Visiting Professor of Earth and Planetary Sciences, Visiting Professor of Physical Oceanography and Climate

Other Faculty Offering Instruction in the Department of Earth and Planetary Sciences

For more information about Earth and Planetary Sciences, please visit the department’s website at www.eps.harvard.edu.

Primarily for Undergraduates

**Earth and Planetary Sciences 21 (formerly EPS 7). The Dynamic Earth: Geology and Tectonics Through Time**
Catalog Number: 26854
Francis Alexander Macdonald and Richard J. O’Connell
Half course (fall term). M., W., F., at 10, and a weekly three-hour lab to be arranged and two field trips. EXAM GROUP: 3
Students will learn how the Earth works and how critical events in Earth history shaped their surroundings. We will explore what the Earth is made of, why there are continents and oceans, and how plate tectonics provides a unifying model to explain geological observations. Topics covered include the discovery of deep time, the relationship between geology and topography, the geology of our surroundings, plate tectonics, magnetism, chemical differentiation at subduction zones and mid-ocean ridges, mountain building, basin formation, isostasy, heat flow, convection, and feedbacks with the fluid Earth. Ultimately we will use physical processes to explain the patterns of nature. Our treatment will be quantitative with applications to other phenomena, and based on sound physics. Field trips provide opportunities to learn how to read rocks, to see data in the field, and to interpret observations in terms of their possible history and forces acting in and on the Earth.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A. Students who have taken EPS 7 cannot take EPS 21 for credit.

**Earth and Planetary Sciences 22 (formerly EPS 5). The Fluid Earth: Oceans, Atmosphere, Climate, and Environment**
Catalog Number: 79499
Steven C. Wofsy, Hillary S. Jenkins, and Daniel P. Schrag
Half course (spring term). Tu., Th., 1-2:30, and a weekly three-hour lab to be arranged. EXAM GROUP: 15, 16
Introduces students to the fluid Earth, emphasizing Earth’s weather and climate, the carbon cycle, and global environmental change. Course begins with the physical concepts necessary for understanding the structure, motion and energy balance of the atmosphere, ocean, and cryosphere, and then applies these concepts in exploring major earth processes. Examples from Earth’s past history, on-going changes in the climate, and implications for the future are highlighted.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for
Science of the Physical Universe or the Core area requirement for Science A. Students who have taken EPS 5 cannot take EPS 22 for credit.

**Earth and Planetary Sciences 52, Introduction to Global Geophysics - (New Course)**
Catalog Number: 48349
Jerry X. Mitrovica
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*
A comprehensive introduction to global geophysics. This course serves as a bridge between introductory Earth science courses (EPS 21, EPS 22) and higher level courses in EPS. Topics include: plate tectonics, the Earth’s composition, thermal state and rheology, mantle convection, the geodynamo, the Earth’s gravity field and geodesy, comparative planetology, and (modern and paleo) climate change.
*Prerequisite: Applied Mathematics 21a,b (or Mathematics 1a,1b; or Mathematics 21a,b); Physics 11a,b or Physics 15a,b (prior or concurrent); or permission of the instructor.*

**Earth and Planetary Sciences 56, Geobiology and the History of Life - (New Course)**
Catalog Number: 29461
David T. Johnston and Andrew H. Knoll
*Half course (spring term). M., W., F., at 10, and a weekly three-hour lab to be arranged, and one field trip. EXAM GROUP: 3*
Within our solar system, Earth is distinguished as the planet with life. Life was born of planetary processes, has been sustained for some four billion years by planetary processes, and through time has emerged as a set of planetary processes that is important in its own right. In this course we will investigate the ways that Earth and life interact, focusing in particular on the biogeochemical cycles of major elements. This will provide a framework for interpreting the history of life reconstructed from fossils and phylogeny.
*Note: EPS 56 is also offered as OEB 56. Students may not take both EPS 56 and OEB 56 for credit.*
*Prerequisite: EPS 21, 22, or Life Sciences 1b; or permission of instructor.*

*Earth and Planetary Sciences 74r, Field Experiences in Earth and Planetary Sciences*
Catalog Number: 7239
Francis Alexander Macdonald
*Half course (fall term; repeated spring term). Hours to be arranged.*
Attend a domestic or overseas geological summer field school of 3-6 weeks duration to learn methods of obtaining, synthesizing, and interpreting field observations.
*Note: Field schools are selected individually by students with the advice and approval of the instructor. Students must notify the instructor and Academic Administrator of intention to enroll by Study Card Day of the preceding spring term.*

**Earth and Planetary Sciences 91r, Supervised Reading and Research**
Catalog Number: 1462
Ann Pearson and members of the Department
*Half course (fall term; repeated spring term). Hours to be arranged.*
Supervised reading and research on topics not covered by regular courses of instruction.
*Note: Usually intended for junior or senior concentrators in Earth and Planetary Sciences; open*
to sophomore concentrators under some circumstances. To enroll students must submit a registration form, which includes permission of their faculty sponsor, to the Academic Administrator.

**Earth and Planetary Sciences 99r. Tutorial — Senior Year**
Catalog Number: 7120
Sarah Stewart-Mukhopadhyay, Ann Pearson, and members of the Department
*Full course. Hours to be arranged.*
Research and writing of the senior thesis under faculty direction.
*Note:* Senior honors candidates must take at least one term of this course (fall or spring) if writing a thesis; an oral presentation is required. Enrollment includes an informal tutorial series on how to get the most from your thesis experience. To enroll students must submit a registration form, which includes permission of their faculty sponsor, to the Academic Administrator.

**Cross-listed Courses**

**Astronomy 16. Stellar and Planetary Astronomy**
**Science of the Physical Universe 12 (formerly Science A–43). Natural Disasters**
**Science of the Physical Universe 14 (formerly Science B–35). How to Build a Habitable Planet**
**Science of the Physical Universe 25. Energy: Perspectives, Problems and Prospects**
[Science of the Physical Universe 29. The Climate-Energy Challenge]

**For Undergraduates and Graduates**

[Earth and Planetary Sciences 100. The Missing Matlab Course: An Introduction to Programming and Data Analysis]
Catalog Number: 0235
Miaki Ishii
*Half course (spring term). M., W., 2:30-4, and a weekly three-hour lab to be arranged. EXAM GROUP: 7, 8*
An overview of modern computational tools with applications to the Earth Sciences. Introduction to the MATLAB programming and visualization environment. Topics include: statistical and time series analysis, visualization of two- and three-dimensional data sets, tools for solving linear/differential equations, parameter estimation methods. Labs emphasize applications of the methods and tools to a wide range of data in Earth Sciences.
*Note:* Given in alternate years. Expected to be given in 2013–14.
*Prerequisite:* Mathematics 1a, b; or equivalent.

Catalog Number: 61716
Andrew H. Knoll
*Half course (fall term). M., W., F., at 10, and a weekly two-hour lab to be arranged. EXAM GROUP: 3*
Origin, evolution, dispersal, paleoecology, and geologic history of the major groups of the plant kingdom. Laboratory study of representative groups, living and fossil.
2012-2013 Previous Courses of Instruction

Note: EPS 107 is also offered as OEB 107. Students may not take both EPS 107 and OEB 107 for credit.
Prerequisite: OEB 10 or permission of instructor

**Earth and Planetary Sciences 109. Earth Resources and the Environment**
Catalog Number: 2218  
John H. Shaw  
Half course (spring term). Tu., Th., 10-11:30, and three hours of laboratory work each week.  
EXAM GROUP: 12, 13  
An overview of the Earth’s energy and material resources. Following introductions to hydrocarbons, nuclear fuels, and other economically important ores, the course emphasizes methods used to exploit these resources and the environmental impacts of these operations. Topics include: coal and acid rain; petroleum, photochemical smog, and oil spills; nuclear power and radioactive hazards; alternative energies; metals and mining. Labs emphasize methods for discovering and exploiting resources, as well as environmental remediation approaches.  
Note: Given in alternate years. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.  
Prerequisite: EPS 7, 8, or 21; or permission of the instructor.

[Earth and Planetary Sciences 121. Terrestrial Planets]
Catalog Number: 8577  
Sarah Stewart-Mukhopadhyay  
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7  
The physical and chemical processes that influence the initial condition, evolution, and current state of terrestrial planets, focusing on the comparative evolution of Venus, Earth, Mars, and large moons. Topics include: planet formation, evolution of atmospheres, interior composition and equations of state, core formation, differentiation, thermal evolution, and major surface modification processes.  
Note: Expected to be given in 2013–14. Given in alternate years.  
Prerequisite: Physics 11a, b; or permission of instructor.

[Earth and Planetary Sciences 131. Introduction to Physical Oceanography and Climate]
Catalog Number: 2249  
Eli Tziperman  
Half course (spring term). M., Th., 2:30–4, and a lab to be arranged. EXAM GROUP: 7, 8, 16, 17  
Basic observations and theoretical understanding of ocean phenomena from local surface beach waves to the effects of the oceans on global climate. Observations and dynamics of ocean waves, currents, turbulence, temperature and salinity distributions; basic fluid dynamics equations; the ocean’s role in climate: wind-driven circulation and the Gulf stream, thermohaline circulation and the potential instability of Europe’s climate, El Niño, the oceans and global warming.  
Note: Expected to be given in 2013–14. Given in alternate years. When offered, a field trip to Cape Cod and the Woods Hole Oceanographic Institution will be included.  
Prerequisite: Applied Mathematics 21a, b; Physics 11 or 15; or permission of instructor.
Earth and Planetary Sciences 132. Introduction to Meteorology and Climate
Catalog Number: 8495
Brian F. Farrell
Half course (spring term). Tu., Th., 10–11:30, and a weekly lab to be arranged. EXAM GROUP: 12, 13
Physical concepts necessary to understand atmospheric structure and motion. Phenomena studied include the formation of clouds and precipitation, solar and terrestrial radiation, dynamical balance of the large-scale wind, and the origin of cyclones. Concepts developed for understanding today’s atmosphere are applied to understanding the record of past climate change and the prospects for climate change in the future.
Prerequisite: Mathematics 21 or Applied Mathematics 21a and 21b; Physics 11 or 15; or permission of instructor.

Earth and Planetary Sciences 133. Atmospheric Chemistry
Catalog Number: 7731
Daniel J. Jacob
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Note: This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe and the Core area requirement for Science A.
Prerequisite: Physical Sciences 1, 2, Mathematics 1b; or equivalents.

Earth and Planetary Sciences 134. Global Warming Debates: The Reading Course
Catalog Number: 45399
Peter John Huybers and Eli Tziperman
Half course (spring term). W., 3-6, and weekly lab to be arranged. EXAM GROUP: 8, 9
The atmospheric carbon dioxide concentration is now the highest it has been in at least 800,000 years, raising concerns regarding possible future climate changes. This seminar will survey the science of global change from the perspective of scientific debates within climate community. Specifically, the course will involve guided reading and discussion of papers that present contentious view points on the science of global change, with the goal of students learning how to scientifically evaluate these claims. Laboratories will provide students with hands on experience with some climate models and data.
Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Applied Mathematics 21a or equivalent, or permission of instructor.

Catalog Number: 79597
James G. Anderson
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
A solution to the problems set by the intersection of global energy demand and climate
feedbacks requires the teaching of physics and chemistry in that context. Core topics include thermodynamics, free energy, entropy, acid-base and oxidation-reduction reactions, electrochemistry, electromagnetic induction, circuit theory, AC and DC circuits, the nature of photons and of electromagnetic radiation, photochemistry, materials, catalysis, kinetics, molecular bonding, and biological processes for energy conversion and storage.

Note: EPS 135 is also offered as ES 135. Students may not take both EPS 135 and ES 135 for credit.

Prerequisite: Physical Sciences 1, or Physical Sciences 11, or permission of instructor.

**Earth and Planetary Sciences 141. Isotope and Trace Element Geochemistry and Geochronology**
Catalog Number: 7724
Stein B. Jacobsen
Half course (fall term). Tu., Th., 1–2:30.

Note: Given in alternate years.
Prerequisite: A course in college-level chemistry or equivalent; EPS 7 or 21, or equivalent (recommended).

**[Earth and Planetary Sciences 145. Introduction to Igneous Petrology and Petrogenesis]**
Catalog Number: 5940
Charles H. Langmuir
Half course (spring term). M., W., 2:30-4:00, plus a three-hour weekly lab. EXAM GROUP: 7, 8
How igneous rocks form and reveal the processes and fluxes involved in the circulation of the solid Earth. The course begins with the essential elements of igneous petrology—rock description and nomenclature, mineralogy, phase diagrams, processes of melting and crystallization, trace elements. We then consider the formation of igneous rocks at modern igneous settings—spreading centers, convergent margins and ocean islands. We conclude with investigations of igneous phenomenon of the past, such as large igneous flood basalt provinces, anorthosites, komatites and the igneous history of the Moon.

Note: Expected to be given in 2013–14. Given in alternate years.

**[Earth and Planetary Sciences 146. Ocean Ridges and the Earth System]**
Catalog Number: 22518
Charles H. Langmuir
Half course (spring term). M., W., 12–1:30. EXAM GROUP: 5, 6
Course will present our current knowledge of the ocean ridge system where two thirds of Earth’s crust is continually being created. We will examine the progressive understanding of ocean ridges from a historical perspective, emphasizing the process of scientific discovery. Topics include melt generation in the mantle, magmatic processes in the crust, formation of ocean ridge topography, faulting and tectonics, hydrothermal systems, manifestations in the overlying water
column, and the unique ecosystems associated with vents. Approaches must be inherently interdisciplinary, including geochemistry, geophysics, geology, hydrothermal systems, and biology. The place of the ocean ridge system within the overall Earth system will be emphasized. Note: Expected to be given in 2013–14.
Prerequisite: One of: EPS 5, EPS 7, EPS 8, EPS 21, or SPU 14; or permission of instructor.

[Earth and Planetary Sciences 150. Geology and Composition of Planetary Crusts]
Catalog Number: 4726
Stein B. Jacobsen
Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4
The course explains how and why solid planets develop crusts. Chemical and isotopic analyses of rocks and minerals are used to understanding the origin and evolution of planetary crust and their surface environments. Through the study of primitive meteorites, martian meteorites, lunar samples and terrestrial rocks, it is shown how timescales, origin and evolution of planets and their crusts can be inferred from studies of rocks and minerals. It is shown that the Earth’s crust is likely the only one in the Solar System that can support an advanced civilization and also that the Earth’s crust has more than sufficient resources and energy for its human population for the foreseeable future. The principles of mineral structures, phase equilibria, and the origin of igneous, metamorphic, and sedimentary rocks covered in the course are essential for students of geology, geochemistry, planetary science and astrobiology. Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: EPS 7 or 21, and a course in college-level chemistry or equivalent, or permission of instructor.

Catalog Number: 1854
Richard J. O’Connell
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Study of the physics and tectonic processes that govern the properties and evolution of the Earth and other planets. Covers: properties of planets and their interiors; plate tectonics on the Earth; magnetic fields of the Earth and planets; deformation and heat flow and planetary thermal evolution; melting and volcanism in planets; gravity and tidal interaction. Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Introductory physical science and math or permission of instructor.

Earth and Planetary Sciences 162. Hydrology and Environmental Geomechanics - (New Course)
Catalog Number: 76823
James R. Rice
Half course (spring term). M., W., at 11-12, and one and a half hour lab session or section for discussion of assigned problems. EXAM GROUP: 4
Study of water as a critical resource and as a factor in Earth surface and near-surface processes. Focus on development of relevant mechanics and physics. Hydrologic cycle, surface and groundwater, evapotranspiration, soil physics. Flow in porous media, Darcy law, contaminant transport, remediation strategies. Poroelasticity, subsidence, well hydraulics. Seepage forces,

*Note:* EPS 162 is also offered as ES 162. Students may not take both EPS 162 and ES 162 for credit.

**Prerequisite:** Applied Mathematics 21a,b or Mathematics 21a,b and Physics 11a,b or 15a,b

**Earth and Planetary Sciences 166 (Introduction to Seismology). Consequences of Earthquakes**

Catalog Number: 1540

Miaki Ishii

*Half course (fall term). Tu., Th., 2:30–4, and a weekly three-hour lab to be arranged.*

Introduction to seismology with a focus on conceptual understanding of seismic phenomena. Emphasis will be on earthquakes, e.g., detection, mechanism, characteristics, statistics, hazard, and relationship to dynamics. Broader topics such as the types of seismological data and inferences of the Earth’s internal structure also will be covered.

*Note:* Given in alternate years.

**Prerequisite:** Mathematics 21a, b or Applied Mathematics 21a, b (may be taken concurrently); or equivalent.

**Earth and Planetary Sciences 171. Structural Geology and Tectonics**

Catalog Number: 0319

John H. Shaw

*Half course (fall term). Tu., Th., 10-11:30, and three hours of laboratory work each week. EXAM GROUP: 12, 13*

An introduction to the deformation of Earth materials, including the processes of mountain building and plate tectonics, faulting and earthquakes, folding, and ductile deformation. Structures are examined using geologic maps, balanced cross sections, seismic reflection data, satellite imagery, microscopic analysis, analog experiments, and numerical methods. Labs emphasize the applications of structural geology in the energy and environmental industries, and for assessing earthquake hazards.

*Note:* Expected to be given in 2013–14. Given in alternate years.

**Prerequisite:** EPS 7, 8, or 21; or permission of instructor.

**Earth and Planetary Sciences 181. Historical Geobiology**

Catalog Number: 5162

Andrew H. Knoll

*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

A focused inquiry on the interactions of life and environment through geologic history. In 2011 we will focus on the evolution of the modern biota over the past 250 million years.

*Note:* Expected to be given in 2014–15. Given in alternate years.

**Prerequisite:** EPS 8, OEB 10; or permission of instructor.

**Earth and Planetary Sciences 182. Stratigraphy and Sedimentology**

Catalog Number: 37284

Francis Alexander Macdonald

*Half course (spring term). T., Th., 10-11:30, and a two-hour weekly lab to be arranged, and one*
field trip. EXAM GROUP: 10, 11
Techniques in interpreting paleo-environmental information from sedimentary rocks, covering grain-flow, carbonates, glacial deposits, terrestrial, marginal marine, and deep-sea environments, and culminating with cyclo-stratigraphy and basin dynamics.

**Earth and Planetary Sciences 186. Low Temperature Geochemistry I: Introduction to biogeochemical cycles**
Catalog Number: 89929 Enrollment: This course serves to prepare students for EPS 187 (offered in Spring).
David T. Johnston  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
An introduction to low temperature biogeochemistry. We will focus on key biogeochemical elements and look to understand the linkages between the biosphere, atmosphere and hydrosphere. The course begins with a description of marine geochemistry (alkalinity and chemical fluxes) and works toward understanding isotopic fractionation and what it can tell us about the environment. We will explore biogeochemistry over a range of physical and temporal scales.  
*Note:* Given in alternate years.  
*Prerequisite:* A course in college chemistry is recommended.

**Earth and Planetary Sciences 187 (formerly EPS 137). Low Temperature Geochemistry II: Modern and ancient biogeochemical processes**
Catalog Number: 1923  
Ann Pearson  
*Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*  
Introduction to biological and organic chemistry of the Earth’s environment. Primary focus on formation, processing, and preservation of organic carbon, with emphasis on paleoenvironmental applications and on processes occurring at the molecular level. This class is intended to be taken in series with EPS 186, Light Stable Isotope Biogeochemistry.  
*Note:* Given in alternate years.  
*Prerequisite:* A course in college-level chemistry or equivalent. Chemistry 17 or 27 strongly recommended. EPS 186 strongly recommended.

**Earth and Planetary Sciences 189. Analytical and Field Methods in Geobiology**
Catalog Number: 26288 Enrollment: Limited to 10.
David T. Johnston and Ann Pearson  
*Half course (spring term). Hours to be arranged. Regular meetings plus a weekly three-hour lab.*  
Introduction to geobiological research methods: We will learn low temperature geochemical techniques, light stable isotope mass-spectrometry, and other microbiology methods commonly used in geobiological research. The focus will be on the cycling of biogeochemical elements (O, C, S, and Fe) in marine sediments throughout Earth history. This is a lab-based course that will be complemented with lectures.  
*Note:* Given in alternate years.  
*Prerequisite:* EPS 186 and EPS 187 (or equivalent) recommended.

**Cross-listed Courses**
2012-2013 Previous Courses of Instruction

Engineering Sciences 120. Introduction to the Mechanics of Solids
Engineering Sciences 123. Introduction to Fluid Mechanics and Transport Processes
Engineering Sciences 162. Hydrology and Environmental Geomechanics
Engineering Sciences 164. Soil and Environmental Chemistry
OEB 107. Evolution of Plant Life in Geologic Time

**Primarily for Graduates**

Catalog Number: 2675
Steven C. Wofsy and Daniel J. Jacob
Half course (fall term). W., F., 10-11:30 and one to three hours of computer-based laboratory work per week. EXAM GROUP: 3, 4
Atmospheric physics and chemistry: stratospheric and tropospheric transport, photochemistry, and aerosols; stratospheric ozone loss, tropospheric pollution; biogeochemical cycles.
*Note:* Students specializing in this area are expected to take EPS 200 and 236. These courses may serve as an introduction to atmospheric and oceanic processes for other students with strong preparation.
*Prerequisite:* Applied Mathematics 105 (may be taken concurrently), Physics 11 a, b or 15; a course in college-level chemistry or equivalent, or more advanced courses; or permission of the instructors.

Earth and Planetary Sciences 201. Physics of the Earth’s Interior
Catalog Number: 4004
Richard J. O’Connell
The properties and processes of the solid Earth: Continuum mechanics; structure and state of the Earth’s interior; gravity and the geoid; viscous creep and mantle flow; rotational dynamics; heat transport and mantle convection.
*Note:* Given in alternate years.
*Prerequisite:* Applied Mathematics 104, 105; Physics 15 or equivalent. Preparation should be discussed with the instructor.

Catalog Number: 9798
James R. Rice
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Introduction to the mechanics of fluids and solids, organized around earth and environmental phenomena. Conservation laws, stress, deformation and flow. Inviscid fluids and ocean gravity waves; Coriolis dominated large scale flows. Viscosity and groundwater seepage; convective cells; boundary layers. Turbulent stream flows; flood surges; sediment transport. Elasticity and seismic waves. Poro-mechanics and consolidation. Creep and glacial flow. Cracking and faulting. Landslides and debris flows.
*Note:* Expected to be given in 2013–14. Given in alternate years.
*Prerequisite:* Calculus-based introductory physics at level of Physics 11a, b or 15a, b and Mathematics at the level of Applied Mathematics 21a, 21b, and 105 (may be taken concurrently).
Catalog Number: 4472
Brendan J. Meade, James R. Rice, and John H. Shaw
Half course (fall term). M., F., 2:30–4. EXAM GROUP: 7, 8
Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Applied Mathematics 21a, b.

Catalog Number: 4091
Miaki Ishii
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Fundamental concepts used in seismology as a tool in studying the Earth’s deep interior. Topics include stress/strain/elasticity theory, the seismic wave equation, ray theory, surface waves and normal modes, source theory, and inverse methods.
Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Applied Math 105 (may be taken concurrently), or permission of instructor.

Catalog Number: 62097
Jerry X. Mitrovica
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
An introductory treatment of solid Earth geophysics for graduate students in all EPS and SEAS disciplines. The course will cover a sampling of topics that all Earth scientists should have knowledge of, whether to facilitate applications to their own research or to simply follow departmental seminars in geophysics. Topics include: the Earth’s composition and internal boundaries; qualitative and quantitative plate tectonics; the Earth’s energy budget, isostasy; Earth rheology, with examples from seismology, tides, glacial isostatic adjustment and mantle convection; the Earth’s gravity field and geodesy; planetary rotation. Physical concepts will be emphasized over mathematical derivations. While there are no formal pre-requisites for the course, some training in calculus, ordinary and partial differential equations would be helpful. Extra class time and material will be available for students without this background.
Note: Expected to be given in 2013–14. Given in alternate years.

[Earth and Planetary Sciences 208. Physics of Climate]
Catalog Number: 6561
Zhiming Kuang
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Overview of the basic features of the climate system (global energy balance, atmospheric general circulation, ocean circulation, and climate variability) and the underlying physical processes. Prerequisite: Applied Mathematics 105 (may be taken concurrently), Physics 11a, b or 15; or permission of the instructor.
*Earth and Planetary Sciences 210. Introduction to Isotope and Trace Element Geochemistry*

Catalog Number: 9146  
Sujoy Mukhopadhyay and members of the Department  
*Half course (fall term).* M., W., 1–2:30. EXAM GROUP: 6, 7  
The course emphasizes the principles of isotope and trace element geochemistry and their application to relevant problems in Earth and Planetary Sciences. Problems to be addressed include planet formation and differentiation, ocean chemistry, and climate reconstruction.

*Earth and Planetary Sciences 231. Climate Dynamics*

Catalog Number: 6492  
Eli Tziperman  
*Half course (spring term).* M., Th., 2:30–4.  
*Note:* Given in alternate years.  
*Prerequisite:* Background in geophysical fluid dynamics or permission of instructor.

*Earth and Planetary Sciences 232. Dynamic Meteorology*

Catalog Number: 5344  
Brian F. Farrell  
*Half course (fall term).* Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
The atmosphere understood as a fluid dynamical system. Observations of atmospheric motions related to weather and climate. Application of the equations of atmospheric dynamics to explaining phenomena such as jet streams, cyclones and fronts.  
*Prerequisite:* Applied Mathematics 105; or permission of instructor.

*Earth and Planetary Sciences 234. Topics in Generalized Stability Theory - (New Course)*

Catalog Number: 80719  
Brian F. Farrell  
*Half course (fall term).* Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
An introduction to the ideas and approaches to dynamics of generalized stability theory. Topics include autonomous and non-autonomous operator stability, stochastic turbulence models and linear inverse models. Students will learn the concepts behind non-normal thinking and how to apply these ideas in their daily intellectual life.  
*Note:* Given in alternate years.  
*Prerequisite:* Applied Math 105

*Earth and Planetary Sciences 236. Environmental Modeling*

Catalog Number: 7250  
Steven C. Wofsy and Daniel J. Jacob  
*Half course (fall term).* Tu., Th., 6-7:30, plus one to three hours of computer-based laboratory work per week. EXAM GROUP: 18  
Chemical transport models: principles, numerical methods. Inverse models: Bayes’ theorem, optimal estimation, Kalman filter, adjoint methods. Analysis of environmental data:
visualization, time series analysis, Monte Carlo methods, statistical assessment. Students prepare projects and presentations.

Note: Students specializing in this area are expected to take EPS 200 and 236. These courses may serve as an introduction to atmospheric and oceanic processes for other students with strong preparation.

Prerequisite: Applied Mathematics 105 (may be taken concurrently); a course in atmospheric chemistry (EPS 133 or 200 or equivalent); or permission of the instructors.

[Earth and Planetary Sciences 238. Spectroscopy and Radiative Transfer of Planetary Atmospheres]
Catalog Number: 1891
Kelly V. Chance
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Absorption, emission, and scattering of planetary atmospheres, emphasizing Earth. Atmospheric spectroscopic properties for various measurement geometries. Quantitative spectroscopy and atmospheric structure are reviewed. Radiative transfer modeling and simulation and interpretation of atmospheric spectra from microwave through ultraviolet.

Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Ability to program in a high-level computer language (may be learned in parallel with the permission of the instructor).

Earth and Planetary Sciences 239. The Consequences of Energy Systems
Catalog Number: 98708
Daniel P. Schrag
Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17
This course provides an introduction to the physical and chemical impacts of energy choices on human society and natural ecosystems. Topics will include the carbon cycle, climate, air and water pollution, impacts of energy systems on health, land use consequences of energy technologies, and nuclear waste and proliferation.

Note: This course is a requirement for the Graduate Consortium on Energy and Environment.
Prerequisite: College level chemistry and physics and permission of instructor.

Catalog Number: 0187
Stein B. Jacobsen
Half course (spring term). Hours to be arranged.
A review of various computer programs available for computation of geochemical equilibria at low and high temperatures and low and high pressures. The thermodynamic basis for the programs and a critical discussion of the available thermodynamic data bases for such computations. Applications to modeling of planetary surfaces, interiors and formation, in particular including modeling of elements with multiple oxidation states.

Note: Given in alternate years.

[Earth and Planetary Sciences 241r. Isotope Geochemistry and Processes of Planetary Evolution]
Catalog Number: 1680
Stein B. Jacobsen

Half course (spring term). Hours to be arranged.

Note: Expected to be given in 2013–14. Given in alternate years.

[Earth and Planetary Sciences 242. Low Temperature Geochemistry (formerly Biogeochemistry of Light Stable Isotopes)]
Catalog Number: 8808 Enrollment: Limited to 10.
Daniel P. Schrag

Half course (spring term). Hours to be arranged.
Introduction to the theory and methodology of stable isotope biogeochemistry. Topics include isotope ratio mass spectrometry, biological fractionation of carbon and nitrogen isotopes, distribution of isotopes in terrestrial and marine ecosystems, and applications to climate reconstruction.

Note: Expected to be given in 2013–14. Given in alternate years.

Catalog Number: 2002
Stein B. Jacobsen

Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7

Note: Expected to be given in 2013–14. Given in alternate years.

Prerequisite: A course in college-level chemistry or equivalent; Mathematics 21a or Applied Mathematics 21a (may be taken concurrently).

*Earth and Planetary Sciences 245. Petrological Approaches to Understanding the Earth’s System
Catalog Number: 7202
Charles H. Langmuir

Half course (spring term). Th., at 3. EXAM GROUP: 17
The course studies the igneous processes at spreading centers, convergent margins and hot spots, and explores their influences on mantle, crust, ocean and atmosphere and the constraints they provide for the plate tectonic geochemical cycle.

Note: Given in alternate years.

Prerequisite: EPS 145 or permission of instructor.

Catalog Number: 1225
Sarah Stewart-Mukhopadhyay and William J. Nellis
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Research seminar on current problems in planetary sciences. This year’s topic is fundamentals and applications of dynamic compression. Dynamic compression and the high-pressure properties of materials with applications to geophysics, planetary science, material science, and fusion.
Note: Given in alternate years or upon announcement.

[Earth and Planetary Sciences 255r. Topics in Tropical Dynamics]
Catalog Number: 8807
Zhiming Kuang
Half course (spring term). Hours to be arranged.
Research seminar on current problems in tropical dynamics. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions.
Note: Expected to be given in 2013–14.

[Earth and Planetary Sciences 260. Topics in Geophysics]
Catalog Number: 2908
Richard J. O’Connell and Miaki Ishii
Half course (spring term). Hours to be arranged.
Research seminar on current important problems on the state and processes of the solid Earth. Topics may include mantle structure and geochemistry, the core-mantle boundary, the continental lithosphere.
Note: Expected to be given in 2013–14. This course is coordinated with a research course at MIT.

Earth and Planetary Sciences 261. Sea Level Change
Catalog Number: 91589
Jerry X. Mitrovica
Half course (spring term). Tu., Th., 1–2:30.
The physical processes responsible for sea level changes over time scales extending from hours to hundreds of millions of years. Long-term sea-level trends: geological observations, physical mechanisms and eustasy, dynamic topography. Sea-level change on an ice age Earth (glacial isostatic adjustment, GIA): observations, viscoelastic loading, mantle viscosity, the Last Glacial Maximum (LGM), interglacial sea-level change, ongoing GIA. Ocean tides: equilibrium and non-equilibrium effects, tidal dissipation. Modern global sea level change: tide gauge and geodetic observations, ice melting and thermal expansion, closing the sea-level budget, sea-level fingerprinting.
Note: Given in alternate years
Prerequisite: Applied Mathematics 21a, b; Physics 11 or 15; or permission of instructor.

[*Earth and Planetary Sciences 262. Theoretical Seismology]
Catalog Number: 35838
Miaki Ishii
Half course (fall term). Hours to be arranged.
Theoretical aspects of seismology with strong emphasis on global free-oscillation seismology. Topics include continuum mechanics, equations of motion, linearization, perturbation theory,
elasticity & anelasticity, rotation & ellipticity, spheroidal & toroidal modes of the Earth, mode splitting, and multiplet coupling.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Applied Mathematics 202 or equivalent, or permission of instructor; EPS 204.

**[Earth and Planetary Sciences 265r. Topics in Geodynamics]**
Catalog Number: 0816
Richard J. O’Connell

*Half course (fall term). W., F., 2:30–4. EXAM GROUP: 7, 8*

Topics in the dynamics of processes and properties in the Earth’s interior, including: thermal convection and flow in the mantle, rheology of the mantle, plate motions, plate deformation, physical properties of rocks and minerals.

*Note:* Expected to be given in 2013–14. Given in alternate years.

**[Earth and Planetary Sciences 266r. Computational Tools in Seismology - (New Course)]**
Catalog Number: 25351
Miaki Ishii

*Half course (spring term). Hours to be arranged.*

Seminars course that investigates computational tools that are readily available. Students will select one to two techniques (e.g., receiver functions and focal mechanism determination), present the basis, current research using the technique(s), and lead the class through installation and application of the method.

*Note:* Given in alternate years.

*Prerequisite:* EPS 204 or equivalent and computer programming experience; or permission of instructor.

**[*Earth and Planetary Sciences 269r. Topics in Crustal Dynamics]*
Catalog Number: 8157
Brendan J. Meade and John H. Shaw

*Half course (fall term). Hours to be arranged.*

Research seminar on current problems of tectonics, faulting, and earthquake occurrence at the Pacific-North America plate boundary in California. Emphasis on the identification of extant problems that may be resolved with contemporary geologic, geophysical, and geodetic data analysis and process based modeling.

*Note:* Expected to be given in 2013–14. Given in alternate years.

**Earth and Planetary Sciences 270r. Advanced Structural Interpretation Methods**
Catalog Number: 8230
John H. Shaw

*Half course (fall term). Hours to be arranged.*

Methods of interpreting complex geologic structures imaged in 2- and 3-dimensional seismic reflection data. Methods of integrated geologic and remote sensing data will be described. Students will complete independent projects analyzing seismic data on workstations.

*Note:* Given in alternate years.

*Prerequisite:* EPS 171 or equivalent.
**Earth and Planetary Sciences 272r. Topics in Structural Geology**  
Catalog Number: 1546  
*John H. Shaw and Brendan J. Meade*  
*Half course (spring term). Hours to be arranged.*  
Seminar course investigating recent advances in structural geology and geophysics with applications in earthquake science and the energy industry. Specific topics vary from year to year.  
*Note:* Given in alternate years.  
*Prerequisite:* EPS 171 or equivalent. Intended for graduate and advanced undergraduate students involved in structural geology research.

**Earth and Planetary Sciences 274r. Field Geology**  
Catalog Number: 74831 Enrollment: Limited.  
*Francis Alexander Macdonald*  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Field-based course in the Mojave Desert during January term. Students will learn how to identify, measure, and interpret geological data and synthesize their data with previous studies. Specific skills and topics include: mineral/lithological identification, structural microfabrics, macro-structure, mapping, regional geology, tectonics, sedimentary structures, and stratigraphy. This is a project-based class in which students will be assigned individual map areas and will analyze data, digitize maps, and complete a geological report during the spring term. Approximately one third of the course work will be done during the spring term.

**Earth and Planetary Sciences 281r. Great Papers in Earth Sciences**  
Catalog Number: 2474  
*Eli Tziperman*  
*Half course (spring term). W., 3–5.*  
A survey and discussion of groundbreaking papers from across the Earth sciences.

**Earth and Planetary Sciences 282r. Topics in Stratigraphy and Earth History**  
Catalog Number: 60506  
*Francis Alexander Macdonald*  
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*  
Readings and discussions on current problems in stratigraphy and Earth history. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions.  
*Note:* Expected to be given in 2013–14.

**Earth and Planetary Sciences 286r. Current Topics in Biogeochemistry I: Electron budgets through time**  
Catalog Number: 38407  
*David T. Johnston and Ann Pearson*  
*Half course (fall term). Th., 9–12. EXAM GROUP: 11, 12, 13*  
An intensive reading course that will systematically track the evidence for O2, SO4, NO3, and Fe3+ budgets through Earth history. We will evaluate the sharpness of various proxies, while building models for the budgets of key electron acceptors in the ocean and atmosphere system.
This will be a seminar class focused on discussion rather than lecture. Assessment will be based on participation, 2-3 modeling projects, and a term paper.

*Note:* Expected to be given in 2013–14. This class, together with EPS 287, replace EPS 237 Advanced Biogeochemistry. EPS 286 and 287 can be taken in series or individually. Given in alternate years.

*Prerequisite:* EPS 186 and 187/137 or equivalent; or permission of instructor.

[*Earth and Planetary Sciences 287 (formerly EPS 237). Current Topics in Biogeochemistry II: Role of the biological pump in the carbon cycle*]

Catalog Number: 9320

Ann Pearson and David T. Johnston

Half course (spring term). Hours to be arranged.

An intensive reading course that will compare modern oceanographic approaches to the biological pump with concepts of the size and function of the biological pump over geologic time. We will review the carbon cycle; carbon, nitrogen, and oxygen isotope proxies; and will stress simple calculations and limited box models. This will be a seminar class focused on discussion rather than lecture. Assessment will be based on participation, several short problem sets, and a term paper.

*Note:* Expected to be given in 2013–14. Meets once a week for three hours. Given in alternate years.

*Prerequisite:* EPS 186 and 187/137 or equivalent; or permission of instructor.

**Earth and Planetary Sciences 290. Scientific Communication**

Catalog Number: 6610

Sarah Stewart-Mukhopadhyay

Half course (fall term). Hours to be arranged.

Teaches students how to effectively, communicate scientific concepts focusing on short oral presentations based on current journal articles drawn from Earth and Planetary Sciences. Technical presentation skills (planning, delivery, managing nervousness, etc.) developed through weekly practice and detailed feedback.

*Note:* Recommended for EPS graduate students in their 1st or 2nd year. Topics include: differences between written and oral communication; structure and organization of short vs. long and general vs. technical talks; and effective use of visualizations including poster presentations.

Wed. 9/5 3-4 PM -- Introductory meeting followed by First-Year Talks. Fri. 9/7 4-5 PM -- Introduction (cont.) and Organizational Meeting

**Cross-listed courses**

**Engineering Sciences 220. Fluid Dynamics**

**Engineering Sciences 240. Solid Mechanics**

**Engineering Sciences 241. Advanced Elasticity**

[**Engineering Sciences 263. Microbial Geochemistry**]

[**Engineering Sciences 264. Advanced Aqueous and Environmental Chemistry**]

**Engineering Sciences 267. Aerosol Science and Technology**

**Graduate Courses of Reading and Research**
*Earth and Planetary Sciences 320. Topics in Planetary Sciences  
Catalog Number: 6050  
Sarah Stewart-Mukhopadhyay 4637

Catalog Number: 3810  
James G. Anderson 6057

*Earth and Planetary Sciences 331. Atmospheric Chemistry  
Catalog Number: 4038  
Daniel J. Jacob 1781

*Earth and Planetary Sciences 332. Dynamic Meteorology  
Catalog Number: 2802  
Brian F. Farrell 7628

Catalog Number: 4927  
Scot T. Martin 3365

Catalog Number: 4886  
Michael B. McElroy 2462

*Earth and Planetary Sciences 335. Climate Dynamics and Physical Oceanography  
Catalog Number: 3095  
Eli Tziperman 4748

*Earth and Planetary Sciences 336. Geophysical Fluid Dynamics  
Catalog Number: 8851  
Eli Tziperman 4748

*Earth and Planetary Sciences 337. Biological Oceanography  
Catalog Number: 5704  
James J. McCarthy 4343

*Earth and Planetary Sciences 338. Atmospheric Chemistry  
Catalog Number: 7596  
Steven C. Wofsy 4396

Catalog Number: 9843  
Ann Pearson 4224
*Earth and Planetary Sciences 340. Topics in Isotope Geochemistry: Research Seminar
Catalog Number: 2881
Stein B. Jacobsen 7212

*Earth and Planetary Sciences 341. Isotope Geochemistry
Catalog Number: 7103
Stein B. Jacobsen 7212

*Earth and Planetary Sciences 342. Topics in Atmospheric and Climate Dynamics
Catalog Number: 1732
Zhiming Kuang 5285

*Earth and Planetary Sciences 343. Topics in Quantitative Analysis of the Climate Record
Catalog Number: 2979
Peter John Huybers 5746 (on leave 2012-13)

*Earth and Planetary Sciences 344. Topics in Stable Isotope Geochemistry and Geochemical Oceanography
Catalog Number: 6291
Daniel P. Schrag 3054

*Earth and Planetary Sciences 345. Solid Earth Geochemistry
Catalog Number: 7979
Charles H. Langmuir 4293

*Earth and Planetary Sciences 346. Topics in Noble Gas Geochemistry
Catalog Number: 2928
Sujoy Mukhopadhyay 4621

*Earth and Planetary Sciences 347. Topics in Environmental Policy
Catalog Number: 4360
John P. Holdren (Kennedy School, Faculty of Arts and Sciences) 2673

*Earth and Planetary Sciences 348. Topics in Microbial Geochemistry
Catalog Number: 52137
Colleen M. Hansel 5609

Catalog Number: 1840
Jeremy Bloxham 2047

Catalog Number: 8664
James R. Rice 7270 (on leave fall term)
Catalog Number: 1438
Jeremy Bloxham 2047

*Earth and Planetary Sciences 365. Geophysics
Catalog Number: 5632
Richard J. O’Connell 3642 (on leave spring term)

Catalog Number: 4447
Jerry X. Mitrovica 6696

*Earth and Planetary Sciences 368. Seismology
Catalog Number: 4932
Miaki Ishii 5493

*Earth and Planetary Sciences 369. Topics in Active Tectonics
Catalog Number: 5904
Brendan J. Meade 5340

*Earth and Planetary Sciences 370. Structural Analysis
Catalog Number: 9046
John H. Shaw 3699

*Earth and Planetary Sciences 380. Topics in Geology and Earth History
Catalog Number: 1161
Francis Alexander Macdonald 6283

*Earth and Planetary Sciences 381. Topics in Stable Isotope Geobiology and Earth History
Catalog Number: 22177
David T. Johnston 6278

*Earth and Planetary Sciences 387. Paleobotany
Catalog Number: 6983
Andrew H. Knoll 7425

East Asian Languages and Civilizations

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION
Faculty of the Department of East Asian Languages and Civilizations

Shigehisa Kuriyama, Reischauer Institute Professor of Cultural History (Chair)
Ryuichi Abe, Reischauer Institute Professor of Japanese Religions
Avram Asenov Agov, Lecturer on East Asian Languages and Civilizations
Mettursun Beydulla, Preceptor in Uyghur
Peter K. Bol, Charles H. Carswell Professor of East Asian Languages and Civilizations
Meina Cai, Lecturer on East Asian Languages and Civilizations
Edwin A. Cranston, Professor of Japanese Literature
Nara Dillon, Lecturer on East Asian Languages and Civilizations
Carter J. Eckert, Yoon Se Young Professor of Korean History (on leave spring term)
Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History (on leave fall term)
John Mark Frankl, Lecturer on East Asian Languages and Civilizations
Binnan Gao, Preceptor in Chinese
Andrew Gordon, Lee and Juliet Folger Fund Professor of History
Helen Hardacre, Reischauer Institute Professor of Japanese Religions and Society
David Howell, Professor of Japanese History
Haibo Hu, Preceptor in East Asian Languages and Civilizations
Hui-Yen Huang, Senior Preceptor in Chinese
Wilt L. Idema, Professor of Chinese Literature (on leave 2012-13)
Wesley M. Jacobsen, Professor of the Practice of the Japanese Language and Director of the Japanese Language Program
Hee-Jeong Jeong, Preceptor in Korean
Jihyeon Jeong, College Fellow in the Department of East Asian Languages and Civilizations
Heeyeong Jung, Preceptor in Korean
Yuko Kageyama-Hunt, Preceptor in Japanese
Sun Joo Kim, Harvard-Yenching Professor of Korean History
Wai-yee Li, Professor of Chinese Literature (Director of Graduate Studies)
Jennifer Li-Chia Liu, Senior Lecturer on Chinese Language and Director of the Chinese Language Program
Wei Liu, Preceptor in Chinese (on leave fall term)
Yasuko Matsumoto, Preceptor in Japanese
Satomi Matsumura, Senior Preceptor in Japanese
David McCann, Korea Foundation Professor of Korean Literature (on leave fall term)
Melissa M. McCormick, Professor of Japanese Art and Culture (on leave 2012-13)
Binh Ngo, Senior Preceptor in Vietnamese and Director of the Vietnamese Language Program
Halle O’Neal, Lecturer on East Asian Languages and Civilizations
Sang-suk Oh, Senior Preceptor in Korean and Director of the Korean Language Program
Stephen Owen, James Bryant Conant University Professor (on leave fall term)
Franz Prichard, Lecturer on East Asian Languages and Civilizations
Michael J. Puett, Walter C. Klein Professor of Chinese History
James Robson, Professor of East Asian Languages and Civilizations (on leave 2012-13)
Ikue Shingu, Preceptor in Japanese
Hongyun Sun, Preceptor in Chinese
Michael A. Szonyi, Professor of Chinese History (Director of Undergraduate Studies)
Xiaofei Tian, Professor of Chinese Literature
Ye Tian, Preceptor in Chinese
Leonard W. J. van der Kuijp, Professor of Tibetan and Himalayan Studies
David Der-Wei Wang, Edward C. Henderson Professor of Chinese Literature
Miaomiao Wang, Preceptor in Chinese
Xiaojue Wang, Visiting Assistant Professor of East Asian Languages and Civilizations
Xuedong Wang, Preceptor in Chinese
Lei Yan, Preceptor in Chinese (on leave spring term)
Tomiko Yoda, Takashima Professor of Japanese Humanities
Alexander Nikolas Zahlten, Assistant Professor of East Asian Languages and Civilizations
Chen Zhang, Preceptor in East Asian Languages and Civilizations
Xin-yi Zhang, Preceptor in Chinese
Tingyang Zhao, Visiting Lecturer on East Asian Languages and Civilizations

Other Faculty Offering Instruction in East Asian Languages and Civilizations

Janet Gyatso, Hershey Professor of Buddhist Studies (Divinity School)
Susan J. Pharr, Edwin O. Reischauer Professor of Japanese Politics

Committee for the Social Science Program in East Asian Studies of the Department of East Asian Languages and Civilizations

Courses listed under the Department of East Asian Languages and Civilizations begin with department tutorials and then are grouped by area: China, Japan, Korea, Manchu, Mongolia, Tibet, and Vietnam. Each area is divided into language, history, and literature courses, then “Graduate Courses of Reading and Research,” and concludes with cross-listings from other departments. Please note that courses under each heading are categorized as either “For Undergraduates and Graduates” or “Primarily for Graduates.”

The concentration draws upon faculty working on East Asian topics from the Department of East Asian Languages and Civilizations and from other departments. It offers both a humanities track, in which the history, literature, philosophy, and religion of premodern and modern times are studied, and a social science track, stressing approaches to modern East Asia drawn from the social science disciplines.

Courses in the Language Programs are designed to be taken in sequence and cannot be taken out of order. There are no auditors permitted in the Language Programs and language courses must be taken for a grade. Independent study in languages will only be offered after completion of all courses in the sequence, and with permission of the Director of that language. Placement and admission to a course is at the discretion of the Director of the Program.

East Asian Studies

Primarily for Undergraduates
East Asian Studies 90r. East Asian Language Tutorials - *(New Course)*
Catalog Number: 74997
Michael A. Szonyi and members of the Department
*Half course (fall term; repeated spring term). Hours to be arranged.*
Independent reading and research in an East Asian language.

*East Asian Studies 91r. Supervised Reading and Research*
Catalog Number: 0961
Michael A. Szonyi and members of the Department
*Half course (fall term; repeated spring term). Hours to be arranged.*
Independent reading and research in East Asian Studies.
*Note:* Open to students who have given evidence of ability to do independent reading and research. May be taken on an individual basis or by small groups of students interested in working on the same topic. Permission of the Director of Undergraduate Studies required.

East Asian Studies 97ab. Introduction to East Asian Civilizations
Catalog Number: 2337
Michael A. Szonyi and members of the Department
*Half course (spring term). Tu., Th., at 12; F., at 10.*
This interdisciplinary and team-taught course provides an introduction to several of the approaches and methods through which the societies and cultures of East Asia can be studied at Harvard, including history, philosophy, literary studies, political science, film studies, anthropology and gender studies. We consider both commonalities and differences across the region, and explore how larger processes of imperialism, modernization, and globalization have shaped contemporary East Asian societies and their future trajectories.
*Note:* Required of sophomore concentrators and secondary field candidates. Open to freshmen. EAS 97ab may not be taken Pass/Fail.

[East Asian Studies 98a. Tutorial--Junior Year: State-Society Relations in Modern China]
Catalog Number: 0964
Elizabeth J. Perry
*Half course (spring term). Hours to be arranged.*
Junior Tutorial for students in the China Social Science track.
*Note:* Expected to be given in 2014–15. EAS 98a, 98b, 98d, 98g or a substitution approved by the Director of Undergraduate Studies is required for all EAS concentrators. Preference to EAS concentrators but open to Government concentrators.

East Asian Studies 98b. Junior Tutorial--Japan and the World
Catalog Number: 8288
Susan J. Pharr
*Half course (fall term). Tu., 3-5 with an additional hour to be arranged.*
Junior Tutorial for students in the Japan Social Science track. For students with an interest in the society, economy, politics, and popular culture of contemporary Japan and its place in the world.
*Note:* EAS 98a, 98b, 98d, 98g or a substitution approved by the Director of Undergraduate Studies is required for all EAS concentrators. Preference to EAS students but open to Government concentrators.
**East Asian Studies 98d. Junior Tutorial—The Political Economy of Modern China**

Catalog Number: 4800  
*Nara Dillon*

*Half course (fall term). W., 1–3.*  
Junior Tutorial for students with an interest in China Social Sciences. After an introduction to the historical context of China’s development, this course will focus on the political economy of reform in the post-Mao period. Some of the topics covered include democracy, the 1989 Tiananmen protests, the rise of entrepreneurs, the role of labor, rural-urban migration, and the Internet.  
*Note:* EAS 98a, 98b, 98d, 98g or a substitution approved by the Director of Undergraduate Studies is required for all EAS concentrators. Preference to EAS students but open to Government concentrators.

**East Asian Studies 98f. Junior Tutorial —The Study of East Asian Religions**

Catalog Number: 94577  
*James Robson*

*Half course (fall term). Tu., at 2.*  
This tutorial is designed to deepen and extend the student’s knowledge of the study of East Asian religions. It will build on the student’s foundational understanding of the development and history of Buddhism, Daosim, Confucianism, Shinto, and various forms of popular religion, by situating that material in the context of larger issues in the study of East Asian religions. The overarching concern within this tutorial will be on reading and discussing methodologically oriented scholarship that will introduce the student to new and intellectually engaging approaches to the various traditions covered.  
*Note:* Expected to be given in 2013–14. EAS 98a, 98b, 98d, 98g or a substitution approved by the Director of Undergraduate Studies is required for all EAS concentrators.  
*Prerequisite:* Culture and Belief 33: Introduction to the Study of East Asian Religions. If students have not previously taken this course, they are required to attend those lectures concurrently with this tutorial.

**East Asian Studies 98h. Junior Tutorial—Modern Korea History Reading and Research**

Catalog Number: 29637  
*Carter J. Eckert*

*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*  
Readings of various materials related to the history of modern Korea, in conjunction with the research and writing of a term paper using primary and secondary sources. Readings for fall 2012 will center on contemporary history after 1945.  
*Note:* Note: EAS 98a, 98b, 98d, 98g, 98h or a substitution approved by the Director of Undergraduate Studies is required for all EAS concentrators.  
*Prerequisite:* Societies of the World 27: The Two Koreas, or equivalent.

**East Asian Studies 99. Tutorial — Senior Year**

Catalog Number: 0384  
*Michael A. Szonyi and members of the Department*

*Full course. Hours to be arranged.*  
Thesis guidance under faculty direction.
Note: All students writing an EAS or joint EAS thesis will attend a research and writing workshop that meets twice each term.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 44. Arts of Asia]
[Culture and Belief 11. Medicine and the Body in East Asia and in Europe]
Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
[Culture and Belief 33. Introduction to the Study of East Asian Religions]
[Ethical Reasoning 29. Social Theory, the Humanities, and Philosophy Now]
[Societies of the World 22. Asia in the Making of the Modern World]

For Undergraduates and Graduates

East Asian Studies 103. Ethnic Politics in Contemporary China - (New Course)
Catalog Number: 51228
Jihyeon Jeong
Half course (fall term). Tu., Th., 11:30–1.
This course will introduce students to the politics of ethnic groups in the context of contemporary PRC. We study several minority groups in detail, comparing and contrasting across different dimensions. The following questions assist in this process: What are the commonalities underlying minority experiences? How do we systematically account for variation in political and socio-economic contexts? How do we characterize minority-state relations and how do domestic and external factors condition outcomes? Each topic also provides an opportunity to address questions of methodology: what instruments do we have to assess the situation? What methods can we use to address it?

East Asian Studies 104. Contemporary Chinese Economy: Seminar - (New Course)
Catalog Number: 87643 Enrollment: Limited to 15.
Jihyeon Jeong
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
This seminar examines in depth the challenges posed by China’s rapid economic development in the post-reform period. The first half of the course considers the basic contours of China’s domestic economic system. In the second half, we look to its evolving position within the global economy and trace the process by which external factors lead to increasing change within its borders. The PRC appears torn by conflicting and competing processes: economic liberalization and political repression, de-centralization and re-centralization. We ask: what is the political and economic future of China? Is its current development sustainable under continued CCP rule? How does the international economic environment affect China’s domestic outcomes?

East Asian Studies 105. The Political Economy of Transition in China - (New Course)
Catalog Number: 66335 Enrollment: Limited to 15.
Meina Cai
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
This course provides an overview of the political economy of transition in China, with a focus on Chinese experience that contradicts conventional wisdoms in significant ways. It begins with an
introduction of the nature of communism, an important point of departure to understand the tasks and obstacles of transition. The bulk of the material examines China’s development strategies during the reform era with focuses on industrial sector, fiscal and land reforms. Third, it addresses the politics of China’s transition, with detailed discussion on grassroots elections, public goods provision, and prospectus of democratization.

**Prerequisite:** Students may take this course without prerequisites. However, previous background in the study of political economy or modern China will be very helpful.

**East Asian Studies 106. Art of Buddhist Relic and Reliquary: Conference Course - (New Course)**
Catalog Number: 26424
Halle O’Neal

*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*

This course analyzes the veneration of Buddhist relics and the construction of reliquaries from a visual perspective. The overarching focus of the course will be on the art, ritual, and devotion to relics and reliquaries as manifested in the material and visual cultures of Asia. Connections will be drawn between the varying forms and functions of relic worship and reliquary construction across India, China, Korea, Japan, and Southeast Asia.

**East Asian Studies 121. Global Cities in East Asia**
Catalog Number: 43797
Nara Dillon

*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*

This course examines urbanization and globalization in East Asia, focusing first on the development of Tokyo as a global city, then turning to the socialist cities of contemporary China, before concluding with an examination of uneven development in Southeast Asian cities. In each section of the course, we will examine how urbanization and globalization affect major social groups (in particular, entrepreneurs and women) who have both propelled and been marginalized by these processes.

**East Asian Studies 129. The World of the Three Kingdoms: Seminar - (New Course)**
Catalog Number: 20018
Xiaofei Tian

*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*

This course explores the appeal of the “Three Kingdoms,” a dangerous and violent time, and examines the nostalgic construction of the world of the Three Kingdoms from medieval times through contemporary period, in the forms of fiction, poetry, plays, movies, TV series, video games, MVs and fan fiction. Using the concept of “nostalgia” as a point of entry, this class offers an account of the nuances in the phenomenon and sentiments of nostalgia about the Three Kingdoms in different periods throughout Chinese history, with emphasis on nostalgia as a historical emotion and a modern global condition.

*Note:* Intended for undergraduate and graduate students. All readings in English (students may opt to read in Chinese). No specific background in Chinese or East Asian Studies required.

[*East Asian Studies 133. The Limits of China: Imaginations of Affinity and Estrangement in Local, National, and Global Worlds: Seminar*]
Our goal in this seminar is to investigate conceptions of "Chineseness" (both past and present, within China and beyond China) by focusing on the long arc of China’s historical and social transformations—from imperial polity to nation-state to its global diaspora. Through our investigation of this arc and its multiple accompanying social, cultural, and political transformations, we seek to identify telltale clues for examining the negotiated limits of Chinese imaginings of affinity and estrangement in local, national, and global worlds as well as the social and political effects of those imaginings.

Note: Expected to be given in 2013–14.

**East Asian Studies 140. Major Religious Texts of East Asia**

Catalog Number: 0856

Ryuichi Abe

*Half course (fall term).* W., 2–4:30. EXAM GROUP: 7, 8, 9

This course aims at enabling students to read and analyze in depth major religious texts of East Asia, representing diverse traditions and genres. The course encourages students to take up their reading of texts not only as ways to acquire knowledge on Asian religious traditions, but as practice, labor, and play in which their ordinary way of understanding/experiencing the world and themselves will be challenged, reaffirmed, and renewed.

**East Asian Studies 160. Writing Asian Poetry**

Catalog Number: 0327

David McCann

*Half course (spring term).* Section I: M., 1–3; Section II: M., 9–11. EXAM GROUP: 6, 7

The Japanese haiku is well known, widely published, written about, a part of most school curricula in the United States. The Korean sijo is less known, but stands as a compelling contrast on its own terms and as a verse form in English. The workshop will be reading examples of haiku and sijo, translations as well as poems written and published in English, then writing and comparing the forms. Participants will assemble portfolios of their own original work, with commentary and notes. We will also identify potential magazine, online or other literary journals, prepare and submit selections.

Note: No Asian language knowledge is required; all writing will be in English.

**[East Asian Studies 191. Zen: History, Culture, and Critique]**

Catalog Number: 39452

James Robson

*Half course (spring term).* Tu., Th., 10–11:30.

This course is an introduction to the religious history, philosophy and practices of Zen Buddhism. Zen is the Japanese pronunciation of the Chinese word *Chan*, which is itself a transcription of the Sanskrit word *dhyāna*, meaning meditation. While meditation is the backbone of the Zen tradition, we will see that Zen has a number of different faces and will examine the rich diversity of the Zen tradition as it developed in China, Korea, and Japan.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3012.
Cross-listed Courses

History of Science 180, Science, Technology, and Society in Modern East Asia

Primarily for Graduates

[East Asian Studies 220r. Medieval Japanese Picture Scrolls]
Catalog Number: 1685
Melissa M. McCormick
Half course (fall term). Tu., 1–3.
Examines the rich tradition of medieval Japanese picture scrolls (emaki). Provides training in the reading of scroll texts (kotobagaki), the analysis of paintings, and the examination of the production contexts of important scrolls from the 12th to the 16th century. Aims to make picture scrolls available as a primary source for graduate research in many different disciplines within Japanese studies.
*Note:* Expected to be given in 2014–15.

East Asian Buddhist Studies

Primarily for Graduates

East Asian Buddhist Studies 240r. Japanese Buddhist Doctrine and Monastic Culture: Seminar
Catalog Number: 3768
Ryuichi Abe
Half course (fall term). F., 10–12. EXAM GROUP: 3, 4
A graduate seminar aimed at improving students’ ability to read and analyze scriptural sources in the context of textual, artistic, and other cultural productions centered around large monasteries in premodern Japan. Major theme for this semester: Buddhist cultural exchange between medieval Japan and China.
*Prerequisite:* Classical Japanese and Kambun are required.

East Asian Buddhist Studies 241. Major Issues in the Study of East Asian Buddhism
Catalog Number: 57596
Ryuichi Abe
Half course (fall term). Hours to be arranged.
A graduate seminar that critically examines major academic works in English on East Asian Buddhism. It is aimed at preparing EALC graduate students for their general examinations in the fields relevant to Buddhism.
*Note:* Expected to be given in 2013–14.

East Asian Buddhist Studies 245r (formerly East Asian Buddhist Studies 245). Ritual and Text in Japanese Buddhist Literature
Catalog Number: 7113
Ryuichi Abe
Half course (spring term). Hours to be arranged.
Examines the way in which rituals are approached, described, and interpreted in primary Japanese Buddhist texts. Students will acquire skills allowing them to move freely in their reading of texts from diverse literary genres. 

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Classical Japanese and *Kambun.*

**[East Asian Buddhist Studies 255. Readings on Chinese Religions: Recent Scholarship on Chinese Buddhism: Seminar]**

*Catalog Number:* 24345

*James Robson*

*Half course (fall term). W., 1–4.*

This seminar aims to discuss significant new works in the field of Chinese Religions by focusing on the historical, doctrinal, and philosophical development of the Buddhist tradition in China. 

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 3232.

**East Asian Buddhist Studies 256r (formerly East Asian Buddhist Studies 256). Chinese Buddhist Texts--Readings in Medieval Buddho-Daoist Documents: Seminar**

*Catalog Number:* 69666

*Ryuichi Abe*

*Half course (spring term). F., 10–1. EXAM GROUP: 3, 4, 5*

This seminar focuses on the careful textual study and translation of a variety of Chinese Buddho-Daoist texts through the medieval period. 

*Note:* Offered jointly with the Divinity School as 3233.

*Prerequisite:* Reading knowledge of classical Chinese required.

**Graduate Courses of Reading and Research**

**East Asian Buddhist Studies 300. Reading and Research**

*Catalog Number:* 9811

*Ryuichi Abe 4974, Janet Gyatso (Divinity School) 4243, and James Robson 6695 (on leave 2012–13)*

**Cross-listed courses**

**Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture**

**History of Art and Architecture 181v. Daoist Art - (New Course)**

**East Asian Film and Media Studies**

**For Undergraduates and Graduates**

**East Asian Film and Media Studies 120. Critical Exposures: Documentary Media in Postwar Japanese Fiction, Film and Photography - (New Course)**

*Catalog Number:* 55056

*Franz Prichard*
Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17
This course examines the social, historical, political and cultural responses to Japan’s rapid economic growth through the lens of Japanese documentary media from the postwar to the present. We will explore major Japanese documentary works that critically engaged issues of cultural identity, community, environmental devastation, regional solidarity, memory, and representation to raise questions about the past, present and future direction(s) of postwar Japanese society. This course will introduce the history and development of diverse literary and visual forms of documentary media with a focus on their stylistic issues and changing methods. The ultimate objective of the course is to foster a critical understanding of the role played by documentary media in exposing the profound crises that shaped Japan’s experience of rapid growth and its aftermath.

Note: All films are subtitled in English.
Prerequisite: No prior knowledge of Japan or Japanese film is necessary to enroll.

Cross-listed Courses

*Freshman Seminar 34w. Mobility and Confusion-Film in East Asia - (New Course)

Primarily for Graduates

East Asian Film and Media Studies 200 (formerly East Asian Studies 200). The Uses and Meaning of the New Arts of Presentation
Catalog Number: 6509 Enrollment: Limited to 16.
Shigehisa Kuriyama
Half course (fall term). M., 4–6. EXAM GROUP: 9
Exploration of the new horizons of communication created by current media technology and their implications for the future of teaching and scholarship. The seminar will combine theoretical readings and reflection with practical, hands-on experiments using podcasts, media-intensive lectures, and iMovies for conveying academic research.

East Asian Film and Media Studies 201 (formerly East Asian Studies 215). Media Mix. Representations and Meaning Between Media in Japan: Seminar - (New Course)
Catalog Number: 91266
Alexander Nikolas Zahlten
Half course (fall term). Th., 2–5 with film screenings on Monday evenings. EXAM GROUP: 16, 17, 18
This course will explore different histories of the interconnection of media in Japan, from the early ties between theater, literature and cinema to the popularization of the media mix by the company Kadokawa and the current routes between manga, anime, light novels, films and games.

East Asian Film and Media Studies 202 (formerly East Asian Studies 216). Rip and Tear--The Body as Moving and Moved Image in Japanese Film: Seminar - (New Course)
Catalog Number: 39744
Alexander Nikolas Zahlten
Half course (spring term). M., 2–5; and a weekly film screening W., 7–9. EXAM GROUP: 7, 8, 9
This course traces the role of the body as a discursive anchor in moving image culture in Japan. The focus will lie on the period after WW II, although the mapping of historical contexts will entail investigations into earlier histories as well.

*East Asian Film and Media Studies 203 (formerly Japanese History 257). Animated Spirituality: Japanese Religion in Anime, Manga, and Film (Graduate Seminar in General Education) - (New Course)
Catalog Number: 80319 Enrollment: Limited to 20.
Helen Hardacre
Half course (fall term). W., 4–6. EXAM GROUP: 9
This course will address the representation of religion in Japanese popular culture, with emphasis on anime, manga, and film, examining depictions of religious figures, themes, and human dilemmas in contemporary popular culture as a gateway to understanding the significance of religion in Japanese society and history.
Note: The seminar will design and develop a General Education course on these themes for undergraduates. This course must be taken Sat/Unsat.

China: Language Courses

For Undergraduates and Graduates

Chinese Ba. Elementary Modern Chinese
Catalog Number: 4375
Hongyun Sun
Half course (fall term). Sections Tu., Th., 10, 11, 1, or 2, and three additional hours to be arranged. EXAM GROUP: 12
Non-intensive introduction to modern Chinese pronunciation, grammar, conversation, reading, and writing.
Note: No auditors. May not be taken Pass/Fail.

Chinese Bb. Elementary Modern Chinese
Catalog Number: 8714
Hongyun Sun
Half course (spring term). Hours to be arranged. EXAM GROUP: 12
Continuation of Chinese Ba.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese Ba or equivalent.

*Chinese Bx. Elementary Chinese for Advanced Beginners
Catalog Number: 7066
Hui-Yen Huang
Half course (fall term). M., W., F., at 10 or 2, and two additional hours to be arranged. EXAM GROUP: 3
For students with significant listening and speaking background. Introductory Modern Chinese language course, with emphasis on reading and writing. Covers in one term the equivalent of Chinese Ba and Bb.
Note: No auditors. May not be taken Pass/Fail. Students must pass a test in listening and speaking to take the course.

**Chinese 120a. Intermediate Modern Chinese**
Catalog Number: 4283
Xuedong Wang
Half course (fall term). Sections Tu., Th., at 10, 12 or 2, and Drill M., W., F., at 10, 11, 12, or 2. EXAM GROUP: 12
Modern texts, conversation, reading, and composition. 
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese Bb or equivalent.

**Chinese 120b. Intermediate Modern Chinese**
Catalog Number: 1702
Xuedong Wang
Half course (spring term). Sections Tu., Th., at 10, 12, or 2, and three additional hours to be arranged. EXAM GROUP: 12
Continuation of Chinese 120a.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 120a, or equivalent.

**Chinese 123xb (formerly Chinese 123b). Intermediate Modern Chinese for Advanced Beginners**
Catalog Number: 7034
Hui-Yen Huang
Half course (spring term). Sections M., W., F. at 10 or 2, and two additional hours to be arranged. EXAM GROUP: 3
Continuation of Chinese Bx. Covers in one term the equivalent of Chinese 120a and 120b.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese Bx, or instructor’s permission.

**Chinese 130a. Advanced Modern Chinese**
Catalog Number: 6724
Lei Yan
Half course (fall term). Sections Tu., Th., at 10, 12, or 2, and three additional hours to be arranged. EXAM GROUP: 12
A study of writings selected from modern Chinese literature, academic works and newspaper articles, aimed at enhancing and further developing the student’s proficiency in modern Chinese language.
Note: Conducted in Chinese. No auditors. May not be taken Pass/Fail.
Prerequisite: Two years of modern Chinese.

**Chinese 130b. Advanced Modern Chinese**
Catalog Number: 2917
Haibo Hu
Half course (spring term). Sections T., Th., at 10, 12, or 2, and three additional hours to be
arranged. EXAM GROUP: 12
Continuation of Chinese 130a.
Note: Conducted in Chinese. No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 130a.

**Chinese 130xa. Advanced Modern Chinese for Heritage Students**
Catalog Number: 9097
Binnan Gao
Half course (fall term). Section I: M., W., F., at 10; Section II: M., W., F., at 12 and two additional hours to be arranged. EXAM GROUP: 3
Designed for heritage learners and covers the equivalent of Chinese 130a and other materials for reading and writing.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 120b, Chinese 123xb, Chinese 125ab, or with permission of instructor.

**Chinese 130xb. Advanced Modern Chinese for Heritage Students**
Catalog Number: 2437
Binnan Gao
Half course (spring term). Section I: M., W., F., at 10; Section II: M., W., F., at 12 and two additional hours to be arranged. EXAM GROUP: 3
Designed for heritage learners and covers the equivalent of Chinese 130b and other materials for reading and writing.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 130xa.

**Chinese 140a. Advanced Readings in Modern Chinese**
Catalog Number: 1945
Miaomiao Wang
Half course (fall term). Sections M., W., F., at 10, or 2, and two additional hours to be arranged. EXAM GROUP: 3
Rapid reading of selections from books and articles.
Note: Conducted in Chinese. No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 130b, Chinese 130xb

**Chinese 140b. Advanced Readings in Modern Chinese**
Catalog Number: 6844
Xin-yi Zhang
Half course (spring term). Sections: M., W., F., at 10, or 2, and two additional hours to be arranged. EXAM GROUP: 3
Continuation of Chinese 140a.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 140a.

**Chinese 142a. Advanced Conversational Chinese**
Catalog Number: 3900 Enrollment: Limited to 12.
Wei Liu and Ye Tian
Half course (fall term). Tu., Th., 10–11:30; Th., at 2, Tu., 2–4.
Spoken Chinese for advanced students.
Note: No auditors. May not be taken Pass/Fail. No native speakers allowed. May not be used for citation.
Prerequisite: Chinese 130b, Chinese 130xb, or equivalent.

*Chinese 142b. Advanced Conversational Chinese
Catalog Number: 1418 Enrollment: Limited to 12. per lecture section.
Ye Tian
Half course (spring term). Tu., Th., 10–11:30 and three additional hours to be arranged. EXAM GROUP: 12, 13
Spoken Chinese for advanced students.
Note: No auditors. May not be taken Pass/Fail. No native speakers allowed. May not be used for citation.
Prerequisite: Chinese 140a, Chinese 142a, or equivalent.

*Chinese 150a. Formal Chinese Writing and Speaking
Catalog Number: 5621 Enrollment: Limited to 20.
Ye Tian
Half course (fall term). Sections M., W., F., at 9, and two additional hours to be arranged. EXAM GROUP: 2
The purpose of this course is to enable students to acquire a comprehensive written grammar with sufficient formal vocabulary in modern Chinese. Formal patterns generated by combining single characters are used for the foundation of written grammar. This course also offers students authentic academic readings in order to improve their abilities in academic writing and formal speech. Students are required to write and present their essays in formal Chinese.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 140b or equivalent.

*Chinese 150b. Formal Chinese Writing and Speaking
Catalog Number: 8111 Enrollment: Limited to 20.
Ye Tian
Half course (spring term). M., W., F., at 9 and two additional hours to be arranged.
Continuation of Chinese 150a.
Note: No auditors. May not be taken Pass/Fail.
Prerequisite: Chinese 150a.

*Chinese 163. Business Chinese
Catalog Number: 6558 Enrollment: Limited to 20.
Binnan Gao (fall term) and Wei Liu (spring term)
Half course (fall term; repeated spring term). Sections M., W., F., at 10 or 12, and two additional hours to be arranged. EXAM GROUP: Fall: 7; Spring: 3
Designed for students interested in international business or for students who intend to work or travel for business in Chinese-speaking communities (including China, Taiwan, Hong Kong, and Singapore), or for students who desire to improve their Chinese language proficiency. An introduction to business and economic climates, practices and customs of these communities.
Students learn specialized business and economic vocabulary and the principles of business correspondence.  
Note: Conducted in Chinese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students.  
Prerequisite: At least three years of modern Chinese or equivalent (with permission of instructor).

**Chinese 166r. Chinese in Humanities - (New Course)**
Catalog Number: 16522  
Jennifer Li-Chia Liu and David Der-Wei Wang  
Half course (spring term). M., W., at 11, and two additional hours to be arranged. EXAM GROUP: 4  
Advanced language practice associated with authentic academic texts in humanities disciplines (e.g., art, literature, religious studies). May be offered independently in Chinese, or linked with an English-language content course. In spring 2013, the topic of this course is "Masterpieces of Modern Chinese Literature."  
Note: All readings and discussions in Chinese. Counts toward Language Citation in Modern Chinese.  
Prerequisite: Grade of B or better in Chinese 140b or equivalent proficiency.

**Chinese 168r. Chinese in Social Sciences - (New Course)**
Catalog Number: 59138  
Jennifer Li-Chia Liu  
Half course (fall term). M., W., at 10. EXAM GROUP: 3  
Advanced language practice associated with authentic academic texts in social science disciplines (e.g., history, politics, sociology, economics). In Fall 2012 the topic of the course is "Society and Culture of Late Imperial China" and it mirrors the issues covered in Chinese History 113.  
Note: Students are required to attend the lectures of Chinese History 113. Most readings in Chinese. Discussions in Chinese. Counts toward Language Citation in Modern Chinese.  
Prerequisite: Grade of B or better in Chinese 140b or equivalent proficiency.

[**Chinese 187. Art and Violence in the Cultural Revolution**]
Catalog Number: 1253  
Xiaofei Tian  
Half course (spring term). Th., 1–3.  
Examines the cultural implications of the Cultural Revolution (1966-1976). We will examine how art was violent towards people and how violence was turned into an art. We will also consider the link between violence, trauma, memory and writing. Materials include memoir, fiction, essay, "revolutionary Peking Opera," and film.  
Note: Expected to be given in 2013–14. Most readings in Chinese. Discussions in Chinese. Count toward Language Citation in Modern Chinese. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C or Foreign Cultures, but not both.  
Prerequisite: Four years of Mandarin or equivalent (with permission of instructor).
Chinese 106a. Introduction to Literary Chinese
Catalog Number: 1185
Chen Zhang
*Half course (fall term).* Tu., Th., 11:30-1. EXAM GROUP: 5, 13, 14
Basic grammar and the reading of simple historical narrative.
*Note:* An additional lecture slot may be added if enough students enroll, with times to be arranged.
*Prerequisite:* At least one year of modern Chinese, or familiarity with Chinese characters through knowledge of Japanese or Korean.

Chinese 106b. Introduction to Literary Chinese
Catalog Number: 3600
Chen Zhang
*Half course (spring term).* Tu., Th., 11:30-1. EXAM GROUP: 13, 14
Introduction to pre-Qin philosophical texts.
*Note:* An additional lecture slot may be added if enough students enroll, with times to be arranged.
*Prerequisite:* Chinese 106a or permission of instructor.

Chinese 107a. Intermediate Literary Chinese
Catalog Number: 3343
Chen Zhang
*Half course (fall term).* Tu., Th., 10-11:30, and an additional hour to be arranged. EXAM GROUP: 12, 13
A second-year course designed to prepare students for reading and research using materials written in Literary Chinese. The focus in the fall semester will be prose from the Tang and Song dynasties.
*Prerequisite:* One year of literary Chinese (Chinese 106 or equivalent).

Chinese 107b. Intermediate Literary Chinese
Catalog Number: 6931
Chen Zhang
*Half course (spring term).* Tu., Th., 10-11:30, and an additional hour to be arranged. EXAM GROUP: 12, 13
A continuation of Chinese 107a, introducing more prose styles as well as poetry and lyric.
*Prerequisite:* Chinese 107a or equivalent.

China: History Courses

For Undergraduates and Graduates

Chinese History 113. Society and Culture of Late Imperial China
Catalog Number: 8264
Michael A. Szonyi
*Half course (fall term).* Tu., Th., 10–11:30.
This course is a survey of the social and cultural history of China from the Song to the mid-Qing
The main goal of the course will be to explore the relationship between social and cultural changes and political and intellectual developments.

**Chinese History 185. Creating ChinaX—Teaching China’s History Online - (New Course)**

Catalog Number: 41785

Peter K. Bol

*Half course (spring term). W., 1–3.*

The course this year will be devoted to creating modules for ChinaX, the new HarvardX course devoted to China’s history and culture from antiquity to the present. In addition to acquiring a general knowledge of China’s history, participants in the course will be actively involved in creating materials for the online course; including producing videos, creating structures for content development, choosing texts and images for online discussion and mark-up, and participating in debates and discussions that will be shown to a world-wide online audience. We hope to do these modules in both English and Chinese versions, but knowledge of Chinese language is not necessary to participate. As presently conceived the course will aim to produce fifteen modules covering topics from the 8th to the 18th century. Topics will include political and institutional history, poetry, novels and short stories, art, social and economic change, and international relations among others. It is possible that the scope will be extended forward and backward in time. This is not a lecture course. There is no final examination. Grades will be based on both a self-assessment and a review of contributions to the modules by peers and faculty.

**Cross-listed Courses**

[Culture and Belief 26 (formerly Foreign Cultures 81). The Culture of Everyday Life in China]


Ethical Reasoning 18 (formerly Moral Reasoning 78). Classical Chinese Ethical and Political Theory

Ethical Reasoning 20 (formerly Humanities 11). Self, Serenity, and Vulnerability: West and East

*Freshman Seminar 46t. Rebels With a Cause: Tiananmen in History and Memory

*History 76c (formerly *History 90g). Major Themes in World History: Colonialism, Imperialism, and Post-Colonialism

*[History 76f (formerly History 1618). Telling Lives in Asia]

History 1628. Modern China - (New Course)

History 1629. China and the Environment: Conference Course - (New Course)

[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]

[Societies of the World 37 (formerly Historical Study A-89). The Chinese Overseas]

[Societies of the World 45 (formerly Chinese History 118). Beyond the Great Wall: China and its Nomadic Other]

**Primarily for Graduates**
[Chinese History 200r (formerly Chinese History 200). Computational Methods for Historical Analysis]
Catalog Number: 5606
Peter K. Bol
Half course (fall term). Hours to be arranged.
History takes place through the actions of people who live in time and space. Modern computational methods provide means of analyzing changes in patterns of behavior and thought among large numbers of people spread across many regions. This course introduces the use of GIS, relational databases, social network analysis, text-mining, and topic modeling for the analysis of geographic information, biographical data, and the content of texts. Separate labs will provide introductory instruction in various computational techniques.
Note: Expected to be given in 2013–14. Introductory meeting to be held Monday at 12 noon.

Chinese History 205. Chinese Political Thought of the Pre-Qin Period - (New Course)
Catalog Number: 31076
Tingyang Zhao
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
This course focuses on Chinese political thought of the pre-Qin period. We will pay particular attention to the metaphysical views of the time. Comparisons will be drawn with Western political thought as well.
Note: Open to qualified undergraduates.

[Chinese History 224. Introduction to T’ang and Sung Historical Sources]
Catalog Number: 0673
Peter K. Bol
Introduction to the reading and interpretation of sources useful in the study of T’ang and Sung history. Recent scholarship and methodological issues are also discussed.
Note: Expected to be given in 2014–15.
Prerequisite: One year of literary Chinese or equivalent.

[Chinese History 225r. Topics in Song History: Seminar]
Catalog Number: 90241
Peter K. Bol
Half course (spring term). Hours to be arranged.
Examines various topics in the political, social, and intellectual history of Song China.
Note: Expected to be given in 2013–14.
Prerequisite: Knowledge of literary Chinese.

Chinese History 228. Introduction to Neo-Confucianism
Catalog Number: 2130
Peter K. Bol
Chinese History 229. Topics in Ming Intellectual History: Seminar
Catalog Number: 23612
Peter K. Bol
Half course (spring term). M., 1–4. EXAM GROUP: 6, 7, 8
Examines various topics in the intellectual and cultural history of Ming China.
Prerequisite: Knowledge of literary Chinese

Chinese History 232r (formerly Chinese History 232). Topics in Han History: Seminar
Catalog Number: 7542
Michael J. Puett
Half course (fall term). Hours to be arranged. EXAM GROUP: 15, 16, 17
Examines various topics in the history of the Han Dynasty.

[Chinese History 233. Sources of Early Chinese History] - (New Course)
Catalog Number: 85192
Michael J. Puett
Half course (fall term). Hours to be arranged.
Chronological survey of recently-discovered paleographic texts and received materials from the late Shang through the early Warring States period, with discussion of problems of contextualization.
Note: Expected to be given in 2014–15.

Chinese History 234. The Historiography of Early Chinese History - (New Course)
Catalog Number: 48777
Michael J. Puett
Half course (spring term). Hours to be arranged.
A study of major trends in the history of scholarship on early China. The main focus will be on 20th-century scholarship, but earlier developments will be introduced where relevant.

[Chinese History 235r. Topics in Warring States History: Seminar]
Catalog Number: 1499
Michael J. Puett
Close reading of texts from the Warring States period.
Note: Expected to be given in 2013–14.

[Chinese History 253. Topics in Late Imperial History]
Catalog Number: 41366
Mark C. Elliott and Michael A. Szonyi
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Review of historical scholarship on China from roughly 1500 to the early 20th century. This course is designed to aid in preparations for the general examinations and in developing a dissertation topic.
Note: Expected to be given in 2014–15.
[Chinese History 255. Popular Religion in Late Imperial China: Historiography]
Catalog Number: 0337
Michael A. Szonyi
Half course (fall term). Tu., 1–4.
We will explore current writings on the relationship between Chinese popular religion and the
Buddhist, Daoist, and Confucian traditions since the Song dynasty. We will discuss religion and
ritual as important aspects of social experience, which interact with and shed light on other
aspects of social relations. Topics discussed will include: syncretism, state regulation and
cultural integration; local cults and Daoism.
Note: Expected to be given in 2015–16.

Chinese History 270a (formerly History 2624a). Research Methods in Late Imperial
Chinese History I: Seminar
Catalog Number: 1863
Mark C. Elliott and Michael A. Szonyi
Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17
Training in the use of a wide array of sources, methods, and reference tools for research in the
history of late imperial China, focusing upon the reading and analysis of different types of Qing-
era documents, official and unofficial. Students will write a research paper using documents
provided in class. Reading knowledge of modern and literary Chinese required.
Note: Open to qualified undergraduates with permission of instructor.
Prerequisite: Chinese 106b or equivalent in foundation literary Chinese.

[Chinese History 270b (formerly Chinese History 264b). Research Methods in Late
Imperial Chinese History II: Seminar]
Catalog Number: 84929
Mark C. Elliott and Michael A. Szonyi
Half course (spring term). Hours to be arranged.
Continued training in sources and methods for research in the history of late imperial China.
Students will use original sources to write a research paper on a topic of their choosing.
Note: Expected to be given in 2013–14.
Prerequisite: Chinese History 270a or consent of instructor.

Cross-listed Courses

[Anthropology 2092. Early China: Archaeology and Texts]
[History 2300. Methods in Intellectual History: Proseminar]
History 2620. Visible and Invisible Hands in China: State and Business since 1800:
Seminar - (New Course)
History 2629. New Directions in the History of Modern China: Seminar - (New Course)

China: Literature Courses

For Undergraduates and Graduates
Chinese Literature 114 (formerly Foreign Cultures 68). Authority and the Claims of the Individual in Chinese Literary Culture
Catalog Number: 9028
Xiaofei Tian
Half course (spring term). M., W., at 11. EXAM GROUP: 4
Examines the role Chinese literary texts have played in articulating the place of the individual as part of, or against, the authority of community and state. Beginning with the celebrations of social integration in the early parts of the Classic of Poetry (early first millennium BC), we will follow the increasingly complex role literature came to play, both as a critic of authority and as establishing a domain of private life.
Note: This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts A, but not both.

Chinese Literature 140. The Greatest Chinese Novel - (New Course)
Catalog Number: 71999
Wai-yee Li
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
The Story of the Stone (also known as The Dream of the Red Chamber) by Cao Xueqin (1715?-1763) is widely recognized as the masterpiece of Chinese fiction. It is also a portal to Chinese civilization. Encyclopedic in scope, this book both sums up Chinese culture and asks of it difficult questions. Its cult status also accounts for modern popular screen and television adaptations. Through a close examination of this text in conjunction with supplementary readings and visual materials, the seminar will explore a series of topics on Chinese culture, including foundational myths, philosophical and religious systems, the status of fiction, conceptions of art and the artist, ideas about love, desire and sexuality, gender roles, garden aesthetics, family and clan structure, and definitions of socio-political order.

Chinese Literature 152. Masterworks of Chinese Fiction: Tradition and Modernity
Catalog Number: 85564
Wai-yee Li
An introduction to the masterworks of Chinese fiction from the Ming and Qing dynasties. Beyond close readings of excerpts from some of the best known Ming-Qing novels, we will explore the contexts that establish their cultural significance: the traditions they build on, their social and intellectual contexts, the commentaries and sequels they generate, and their reverberations in contemporary culture.
Note: Expected to be given in 2013–14. Readings are in both Chinese and English. For works in classical Chinese, students are allowed to consult translations into modern Chinese or English. The course will be taught in Chinese and counts towards the Chinese language citation. It also fulfills the requirement for the EAS junior tutorial.

Cross-listed Courses

For related courses, see also China: Language Courses section.

Aesthetic and Interpretive Understanding 39 (formerly Chinese Literature 150). Old Tales for New Times: The Appropriation of Folklore in Modern and Contemporary China]
Aesthetic and Interpretive Understanding 47 (formerly Literature and Arts A-90).
Forbidden Romance in Modern China
Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China

**Primarily for Graduates**

**Chinese Literature 200. Research Methods in Pre-modern Chinese Literature--Proseminar**
Catalog Number: 2533
Stephen Owen
*Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17*
An introduction to the use of Western and East Asian sources in literary research, including both print and digital media. In addition, one hour each week will be devoted to a basic text in literary theory.
*Note:* Primarily for first- and second-year graduate students (MA or PhD).

**Chinese Literature 201a. History of Chinese Literature: Beginnings through Song**
Catalog Number: 0165
Xiaofei Tian
*Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17*
In-depth, scholarly introduction to history of Chinese literature and literary culture from antiquity through 1400. Also examines state of the field and considers issues for future research. Includes bibliography. Essential for generals preparation.

**Chinese Literature 201b. History of Chinese Literature: 900-1900: Seminar**
Catalog Number: 1760
Wai-yee Li
*Half course (spring term). Tu., 1–4.*
Continuation of Chinese Literature 201a. Provides an in-depth overview of the development of Chinese literature during the late imperial period, with special (but not exclusive) emphasis on the development of vernacular literature.

**Chinese Literature 227r (formerly Chinese Literature 227). Early Chinese Historical Writings: Shiji: Seminar**
Catalog Number: 3773
Wai-yee Li
*Half course (fall term). W., 1–4. EXAM GROUP: 6, 7, 8*
Studies the *Shiji* (Records of the Historian) in the context of Warring States and Han thought and historical developments. Uses the text to explore conceptions of rhetoric, narrative, history, and interpretation in early China. Readings are in classical Chinese, but some of the materials will also be available in English translation.
*Prerequisite:* Reading knowledge of classical Chinese.

**Chinese Literature 229r. Topics in Early Medieval Literature**
Catalog Number: 6099
Xiaofei Tian
Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17
The topic this semester is the autographical writings of the early medieval period.

**Chinese Literature 233. Lu Xun and East Asia: Seminar - (New Course)**
Catalog Number: 31629
David Der-Wei Wang and Xiaojue Wang
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
This seminar proposes to rethink the legacy of Lu Xun from the perspective of East Asia in the twenty-first century. Topics include historical dynamics and repercussions, theoretical interventions, politics and polemics, routes of transculturation. Primary reading materials are in English.

[**Chinese Literature 245r (formerly Chinese Literature 245). Topics in Sinophone Studies - Modern Chinese Fiction on the Periphery**]
Catalog Number: 0321
David Der-Wei Wang
Survey of modern Chinese fiction and narratology from Taiwan, Hong Kong, and the Chinese Diaspora: polemics of the canon, dialogues between national and regional imaginaries, and literary cultures in the Sinophone world.
*Note:* Expected to be given in 2013–14.

Catalog Number: 8098
David Der-Wei Wang
Explores lyricism as an overlooked discourse in modern Chinese literature and culture. Looks into lyrical representations in poetic, narrative, and performative terms and re-defines the polemics of "the lyrical" in the making of Chinese modernities.
*Note:* Expected to be given in 2014–15.

[**Chinese Literature 248. Modern Chinese Literature: Theory and Practice: Seminar**]
Catalog Number: 9486
David Der-Wei Wang
Survey of the concepts, institutions, canons, debates, experiments, and actions that gave rise to, and continually redefined, modern Chinese literature. Equal attention given to theories drawn from Chinese and Western traditions.
*Note:* Expected to be given in 2013–14.

[**Chinese Literature 266r. Topics in Ancient Literature**]
Catalog Number: 6253
Stephen Owen
Half course (fall term). Tu., 1–4.
This term we will read selected works from the Chuci and Han texts in the Chuci tradition.
Note: Expected to be given in 2013–14.
Prerequisite: Two years of literary Chinese or equivalent.

**Chinese Literature 267r. Topics in Tang Literature: Seminar**
Catalog Number: 8521  
Stephen Owen  
*Half course (spring term). W., 1–4.*  
A survey of the three centuries of Tang literature, with special attention to critical issues arising in the study of Tang literature. Topic: Regulated verse.  
*Prerequisite: Two years of literary Chinese or equivalent.*

[**Chinese Literature 268r. Topics in Song and Yuan Literature: Seminar**]
Catalog Number: 7143  
Stephen Owen  
*Half course (fall term). Th., 1–4.*  
The topic this semester will be Northern Song prose and classical poetry.  
*Note: Expected to be given in 2014–15.*  
*Prerequisite: Two years of literary Chinese or equivalent.*

**Chinese Literature 270. From History into Fiction**
Catalog Number: 3474  
David Der-Wei Wang  
*Half course (fall term). M., 2–4. EXAM GROUP: 7, 8*  
A seminar on how literature helped to "emplot" modern Chinese history from the late Qing era to the Cultural Revolution. Discussion focuses on the fictional making of a national history, gendered subjectivity, and nativist vision.

**Cross-listed Courses**

[**Comparative Literature 277. Literature and Diaspora**]  
**History of Art and Architecture 280p. Voices in Chinese Painting - (New Course)**  
**History of Art and Architecture 281v. The Reception of Chinese Paintings in Japan - (New Course)**

**Graduate Courses of Reading and Research**

*Chinese 300. Reading and Research*  
Catalog Number: 4849  
Peter K. Bol 8014, Mark C. Elliott 3329 (on leave fall term), Wilt L. Idema 2511 (on leave 2012-13), Wai-yee Li 3357, Stephen Owen 7418 (on leave fall term), Michael J. Puett 1227, Michael A. Szonyi 4842, Xiaofei Tian 3746, and David Der-Wei Wang 5190

**Japan: Language Courses**

For Undergraduates and Graduates
Japanese Ba. Elementary Japanese
Catalog Number: 2014
Yuko Kageyama-Hunt
Half course (fall term). Sections M., W., F., at 9, 10, or 1, and two additional hours to be arranged for Tu. and Th. EXAM GROUP: 2
This course aims to develop a basic foundation in modern Japanese leading to proficiency in the four language skills of speaking, listening, reading and writing. Emphasis is placed on the use of these skills to communicate effectively in authentic contexts of daily life. Mastery of hiragana, katakana, and approximately 45 Kanji (Chinese characters).

Japanese Bb. Elementary Japanese
Catalog Number: 8728
Yuko Kageyama-Hunt
Half course (spring term). Sections M., W., F., at 9, 10, or 1, and two additional hours to be arranged for Tu. and Th. EXAM GROUP: 2
Continuation of Japanese Ba, with an approximately 135 additional Kanji.
Prerequisite: Japanese Ba or equivalent.

Japanese 106a. Classical Japanese
Catalog Number: 1492
Edwin A. Cranston
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Introduction to classical grammar and texts.
Prerequisite: Japanese 130b.

Japanese 106b. Kambun
Catalog Number: 2602
Edwin A. Cranston
Introduction to Kambun.
Prerequisite: Japanese 106a or equivalent.

Japanese 106c. Later Classical Japanese
Catalog Number: 7307
Edwin A. Cranston
Post-Heian writings in Classical Japanese.
Note: Expected to be given in 2014–15.
Prerequisite: Japanese 106a or equivalent.

Japanese 120a. Intermediate Japanese I
Catalog Number: 8152
Ikue Shingu
Half course (fall term). Sections M., W., F., at 9, 10, or 1 and two additional hours on Tu., and Th., to be arranged. EXAM GROUP: 2, 11
Second-year intermediate level course aimed at consolidation of the basic grammatical patterns
of Japanese and development of reading, writing, speaking, and listening skills to the level necessary for communication in everyday life in Japanese society. Introduction of approximately 150 Chinese characters beyond those introduced in Bb.  
Prerequisite: Japanese Bb or equivalent.

**Japanese 120b. Intermediate Japanese I**  
Catalog Number: 6433  
Ikue Shingu  
Half course (spring term). Sections M., W., F., at 9, 10, or 1 and two additional hours on Tu and Th to be arranged. EXAM GROUP: 2, 11  
Continuation of Japanese 120a. Approximately 150 additional Chinese characters.

**Japanese 130a. Intermediate Japanese II**  
Catalog Number: 4855  
Satomi Matsumura  
Half course (fall term). Sections M., W., F., at 9, 10, or 1 and Speaking Sections Tu., Th., at 9, 10, or 1. EXAM GROUP: 2, 11  
Third-year intermediate advanced course. Development of skills in reading authentic materials from contemporary Japanese media and fiction and in aural comprehension of contemporary television news and drama with decreased reliance on pedagogical aids. Development of speaking and writing skills to an increasingly sophisticated level. Introduction of approximately 200 additional Chinese characters beyond those introduced in 120b.  
Prerequisite: Japanese 120b or equivalent.

**Japanese 130b. Intermediate Japanese II**  
Catalog Number: 6904  
Satomi Matsumura  
Half course (spring term). M. through F., at 9, 10, or 1. EXAM GROUP: 2, 11  
Continuation of Japanese 130a. Approximately 200 additional Chinese characters.

**Japanese 140a. Advanced Modern Japanese**  
Catalog Number: 3688  
Yasuko Matsumoto  
Half course (fall term). Sections: M. through F., at 10 or 1. EXAM GROUP: 3, 12  
Readings of modern texts in both rapid and in-depth modes. Comprehension of media news and drama. Advanced conversation and composition on topics related to the preceding.  
Prerequisite: Japanese 130b.

**Japanese 140b. Advanced Modern Japanese**  
Catalog Number: 8551  
Yasuko Matsumoto  
Half course (spring term). Sections: M. through F., at 10 or 1. EXAM GROUP: 3, 12  
Continuation of Japanese 140a.

**Japanese 150a. Readings and Discussion in Japanese Social Sciences**  
Catalog Number: 4693
Yasuko Matsumoto
Half course (fall term). M., W., F. at 9. EXAM GROUP: 2
Selected readings and discussion in Japanese primarily on contemporary topics in economics, sociology, political science, psychology, and cultural studies, with occasional readings from literature. Readings are supplemented by selections from audiovisual media on current social issues.
Note: Conducted in Japanese.
Prerequisite: Japanese 140b.

**Japanese 150b. Readings and Discussion in Japanese Social Sciences**
Catalog Number: 0984
Yasuko Matsumoto
Half course (spring term). M., W., F., at 9. EXAM GROUP: 2
Continuation of Japanese 150a.
Prerequisite: Japanese 150a.

**Cross-listed Courses**

**Linguistics 173. Linguistic Issues in Japanese**
Linguistics 174. Tense and Aspect in Japanese
Linguistics 176. History and Prehistory of the Japanese Language

**Primarily for Graduates**

Catalog Number: 9182
Wesley M. Jacobsen
Half course (fall term). M., W., F., at 9. EXAM GROUP: 2
Development of skills in reading and translating academic genres of Japanese, with special attention to Japanese scholarship on Chinese and Korean studies. Introduction to old kana usage and classical forms commonly used in scholarly writing.
Prerequisite: Japanese 120b, and graduate standing in some field of Chinese or Korean studies.

Catalog Number: 8918
Wesley M. Jacobsen
Half course (spring term). M., W., F., at 9. EXAM GROUP: 2
Continuation of Japanese 210a.
Note: Expected to be omitted in 2010–11.
Prerequisite: Japanese 210a.

**Japan: History Courses**

**For Undergraduates and Graduates**
[Japanese History 115. Religion and Society in Edo and Meiji Japan]
Catalog Number: 5756
Helen Hardacre
Half course (fall term). W., 1–3.
Examination of religion and society in Japan from 1600-1912, beginning with an era of state control over religious institutions and religious affiliations of the populace, followed by the demise of the Edo-period system and diversification of religious practice in context of rapid social change, modernization, and imperialism during the Meiji period. Separate section for students able to utilize primary sources in Japanese will explore the Maruzen Meiji Microfilm collection in the Harvard-Yenching Library.
Note: Expected to be given in 2014–15. Offered jointly with the Divinity School as 3957. Prerequisite: General knowledge of Japanese history and religion is helpful.

Catalog Number: 65798
Helen Hardacre
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
This conference course is an introduction to the study of Japanese folk religion, popular religious life carried on largely outside the frameworks of Buddhism, Shinto, and other religious institutions. The course aims to interrogate the idea of folk religion and its viability as a field of study within Japanese religions and within contemporary society. In its first half, the course examines the traditional rubrics and topics in the literature on Japanese folk religion. In the second half, the course turns to changes in folk religious life brought about through tourism and the appropriation of folk religious motifs by such contemporary media forms as animé and manga.

[Japanese History 120. Religion and Society in Twentieth-Century Japan]
Catalog Number: 4903
Helen Hardacre
Half course (spring term). W., 1–3.
An examination of religion and society from the end of the Meiji period (1912) to the present. This course explores the meaning of the modern in Japanese religions, the development of the public sphere and religion’s relations with it, religion and nationalism, and the interconnections of religion and social change with materialism, consumerism, pacifism, and spiritualism. Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3958. Prerequisite: General knowledge of Japanese history and religion is helpful. Enrollment in Japanese History 115 recommended but not required.

Japanese History 126. Shinto: Conference Course
Catalog Number: 3097
Helen Hardacre
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
An examination of Shinto, emphasizing its concepts of deity (kami), patterns of ritual and festival, shrines as religious and social institutions, political culture and interactions with party politics, and its contribution to contemporary youth culture. Note: General knowledge of Japanese history and religion is helpful. Japanese language is not
required, but several meetings will be held for students able to use Japanese-language sources. Offered jointly with the Divinity School as 3960.

[Japanese History 130. The History of Curiosity and the Curiosities of Edo Japan]
Catalog Number: 4445 Enrollment: Limited to 30.
Shigehisa Kuriyama
Half course (spring term). Hours to be arranged.
This course probes the nature and history of curiosity by exploring the strangely, extravagantly, intensely curious culture that was Japan in the Edo period (1600-1868), and spotlighting its entwinement with outsiders who were intensely curious about it. The design of the course is unique: crafted as an intellectual adventure game, it presupposes no prior knowledge, but will require keen curiosity and a willingness to experiment with new technologies of learning. In addition to students of Japanese culture, it should particularly interest those fascinated by global connections, early modern science, and the mystery of curiosity.
Note: Expected to be given in 2013–14.

Japanese History 150. Early Modern Japan
Catalog Number: 34071
David Howell
Half course (fall term). Tu., Th., at 2 with a discussion section Thursday afternoon. EXAM GROUP: 16
This course provides an introduction to the history and culture of Japan in the seventeenth through nineteenth centuries. This was the Tokugawa period, the age of samurai rule, in which many elements of modern Japanese culture took familiar form. It was also the time when the roots of Japan’s emergence as a modern state were laid.

Cross-listed Courses

[*History 76a. Japanese Imperialism and the East Asian Modern]
[History 1623. 20th-Century Japan]
Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World
Societies of the World 33 (formerly Foreign Cultures 84). Tokyo

Primarily for Graduates

[Japanese History 260r. Topics in Japanese Cultural History]
Catalog Number: 4539
Shigehisa Kuriyama
Focus for 2009-10: the imagination of money, and its relationship to the science, pictures, and writings of the Edo period. Special attention to the transition from cultures of curiosity to cultures of irony.
Note: Expected to be given in 2013–14.
Prerequisite: Advanced reading knowledge of Japanese with some acquaintance with (or at least concurrent study of) bungo and kambun.
[Japanese History 265. The Muromachi Period: Culture and Context]
Catalog Number: 79695
Melissa M. McCormick
*Half course (fall term). Th., 2–4.*
This graduate seminar surveys the most significant scholarly literature on the cultural history of Japan’s Muromachi period (ca. 1392-1573), with an emphasis on recent publications. Topics to be explored include the built environment of the capital and its institutions; cultural patronage and politics; gender and representation; the material culture of death rituals, funerals, and religious ritual; and the status of the imperial institution during this period.
*Note:* Expected to be given in 2013–14.

**Japanese History 270. Early Modern Japanese History: Proseminar**
Catalog Number: 85593
David Howell
*Half course (fall term). W., 2–5. EXAM GROUP: 7, 8, 9*
This seminar surveys the recent English-language literature on the history of early modern Japan, roughly from the late sixteenth century to around 1875.

Catalog Number: 49178
David Howell
*Half course (spring term). Tu., 2–5. EXAM GROUP: 16, 17, 18*
This seminar deals with the politics, society, and culture of Japan from the late sixteenth to the mid-nineteenth centuries. Readings will include primary and secondary sources in Japanese and English. Students will write a major research paper.

**Cross-listed Courses**

*History 2651. Japanese History: Seminar
History 2653. Historiography of Modern Japan: Proseminar*

**Japan: Literature Courses**

**For Undergraduates and Graduates**

[Japanese Literature 124. The Tale of Genji in Word and Image ]
Catalog Number: 2181
Melissa M. McCormick
*Half course (spring term). W., 1–3.*
Introduces students to The Tale of Genji, often called the world’s first novel, authored by the court lady Murasaki Shikibu around the year 1000 CE. In addition to a close reading of the tale, topics for examination include Japanese court culture, women’s writing, and the tale’s afterlife in painting, prints, drama, manga, and film.
*Note:* Expected to be given in 2013–14.
[Japanese Literature 133. Gender and Japanese Art]
Catalog Number: 2144
Melissa M. McCormick
Half course (fall term). F., 1–3.
Examines the role of gender in the production, reception, and interpretation of visual images in Japan from the twelfth through the twenty-first centuries. Topics include Buddhist conceptions of the feminine and Buddhist painting; sexual identity and illustrated narratives of gender reversals; the dynamics of voyeurism in Ukiyo-e woodblock prints; modernization of images of "modern girls" in the 1920s; and the gender dynamics of girl culture in manga and anime.
Note: Expected to be given in 2013–14.

[Japanese Literature 162. Girl Culture, Media, and Japan]
Catalog Number: 27841
Tomiko Yoda
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
The course examines the ways in which girlhood and girl culture have figured in the construction of gender, nation, and popular medias in modern to contemporary Japan. We will study visual and textual mediums, including novels, magazines, films, manga, and animation, paying attention to principal transformations that have marked the history of modern girl culture in Japan. No prior knowledge of Japanese language or history is expected.
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts C, but not both.

Cross-listed Courses

Aesthetic and Interpretive Understanding 53 (formerly Japanese Literature 161). Anime as Global Popular Culture
*Freshman Seminar 31g. The Pleasures of Japanese Poetry: Reading, Writing, and Translation
*History of Art and Architecture 183m. The Japanese Image Replicated: Woodblocks, Postcards, and Photographs - (New Course)

Primarily for Graduates

Japanese Literature 233r. Nara and Heian Court Literature: Seminar
Catalog Number: 8614
Edwin A. Cranston
Half course (spring term). W., 2–5. EXAM GROUP: 7, 8, 9
Topic: Man’yōshū
Prerequisite: Japanese 106a or equivalent.

Japanese Literature 270. Topics in Modern and Contemporary Japanese Fiction: Seminar
Catalog Number: 10263
Tomiko Yoda
Half course (fall term). W., 2–4:30. EXAM GROUP: 7, 8, 9
A seminar course on the history, theory, and practice of modern to contemporary Japanese
fictions. The course will be organized around a specific theme, time period, a cluster of writers, critics, or genres.

Japanese Literature 271. Topics in Gender and Culture in Japan: Seminar
Catalog Number: 76892
Tomiko Yoda
Half course (spring term). F., 1–3:30. EXAM GROUP: 7, 8
A seminar course that studies the constructions of gender and gender relations in Japan through the examination of various forms of expressive culture (visual, textual, sonic) in their historical contexts.

Cross-listed Courses

[Comparative Literature 277. Literature and Diaspora]

Graduate Courses of Reading and Research

*Japanese 300. Reading and Research
Catalog Number: 4627
Ryuichi Abe 4974, Edwin A. Cranston 1186, Andrew Gordon 1891, Helen Hardacre 3191, Wesley M. Jacobsen 3443, Shigehisa Kuriyama 5269, Satomi Matsumura 2665, Melissa M. McCormick 5331 (on leave 2012-13), and Tomiko Yoda 6301 (spring term only)

Korea: Language Courses

Primarily for Undergraduates

*Korean 91r. Supervised Reading and Research
Catalog Number: 79216
Sang-suk Oh
Half course (fall term; repeated spring term). Hours to be arranged.
Independent reading and research in Korean Language.
Note: Open to students who have completed Korean 150b and given evidence of ability to do independent reading and research. May be taken on an individual basis or by small groups of students interested in working on the same topic.
Prerequisite: Korean 150b and permission of course head.

For Undergraduates and Graduates

Korean Ba. Elementary Korean
Catalog Number: 8739
Sang-suk Oh
Half course (fall term). M., W., F., at 11, and two additional hours to be arranged. EXAM GROUP: 4
Introduction to modern Korean: basic grammar, reading of simple texts, conversational skills, and writing short letters. After successful completion of this course, students are expected to be
able to handle a limited number of interactive, task-oriented, and social situations and to have sufficient control of the writing system to interpret written language in areas of practical needs.

**Korean Bb. Elementary Korean**  
Catalog Number: 8718  
**Sang-suk Oh**  
*Half course (spring term). M., W., F., at 11, and two additional hours to be arranged. EXAM GROUP: 4*  
Continuation of Korean Ba.  
*Prerequisite:* Korean Ba or equivalent.

**Korean Bxa. Elementary Korean for Advanced Beginners**  
Catalog Number: 0120  
**Heeyeong Jung**  
*Half course (fall term). M., W., F., at 10, and two additional hours to be arranged. EXAM GROUP: 3*  
Designed for students with some listening and speaking background, either from prior formal learning or previous exposure to a Korean speaking community. Introductory Korean course, with emphasis on reading and writing. After successful completion of this course, students are expected be able to understand main ideas and/or some facts from the simple connected texts dealing with basic personal and social needs and to be able to meet a number of practical writing needs.

**Korean Bxb. Elementary Korean for Advanced Beginners**  
Catalog Number: 3031  
**Heeyeong Jung**  
*Half course (spring term). M., W., F., at 10, and two additional hours to be arranged. EXAM GROUP: 3*  
Continuation of Korean Bxa.

**Korean 120a. Intermediate Korean**  
Catalog Number: 5884  
**Hee-Jeong Jeong**  
*Half course (fall term). M., W., F., at 10, and two additional hours to be arranged. EXAM GROUP: 3*  
Continuation of elementary Korean to consolidate students’ knowledge of the fundamental grammatical structures of Korean with an aim to increase their abilities to communicate using Korean in a wide range of daily-life transactional situations. After successful completion of second-year Korean, students are expected to handle most uncomplicated communicative tasks and social situations and read consistently with understanding of simple connected texts dealing with personal and social needs.  
*Prerequisite:* Korean Bb or equivalent.

**Korean 120b (formerly Korean 102b). Intermediate Korean**  
Catalog Number: 8590  
**Hee-Jeong Jeong**
Half course (spring term). M., W., F., at 10, and two additional hours to be arranged. EXAM GROUP: 3
Continuation of Korean 120a.
Prerequisite: Korean 120a or equivalent.

**Korean 130a. Pre-advanced Korean**
Catalog Number: 2071
Heeyeong Jung
Half course (fall term). M., W., F., at 1 and Drill T., Th., 1. EXAM GROUP: 11
Continuation of intermediate Korean, to consolidate the student’s knowledge of the grammatical structures of Korean with an aim to increase their abilities to communicate using Korean in a wide range of familiar and everyday topics, current societal events, and factual and concrete topics relating to personal interests. After successful completion of third-year Korean, students are expected to be able to describe and narrate about concrete and factual topics of personal and general interest.
Prerequisite: Korean 120b or equivalent.

**Korean 130b. Pre-advanced Korean**
Catalog Number: 2662
Heeyeong Jung
Half course (spring term). M., F., at 1, and two additional hours to be arranged. EXAM GROUP: 6
Continuation of Korean 130a.
Prerequisite: Korean 130a or equivalent.

**Korean 140a. Advanced Korean**
Catalog Number: 5723
Hee-Jeong Jeong
Half course (fall term). Tu., Th., 2–4. EXAM GROUP: 16, 17
Development of skills in reading materials from contemporary Korean media and fiction and in aural comprehension of contemporary television news and drama with decreased reliance on pedagogical aids. After successful completion of fourth-year Korean, students should be able to satisfy the requirements of various everyday school, and work situations and follow essential points of written discourse which are abstract and linguistically complex, and also to write about a variety of topics in detail with precision.
Prerequisite: Korean 130b or equivalent.

**Korean 140b. Advanced Korean**
Catalog Number: 3011
Hee-Jeong Jeong
Half course (spring term). Tu., Th., 2:30-4:40. EXAM GROUP: 16, 17, 18
Continuation of Korean 140a.
Prerequisite: Korean 140a or equivalent.

**Korean 150a. Readings in Cultural Studies**
Catalog Number: 1936
Sang-suk Oh
Half course (fall term). W., 3–6 with two additional hours to be arranged. EXAM GROUP: 8, 9
Selected readings in contemporary Korean on topics in art, film, drama, and cultural studies, supplemented by selections from audio-visual media on traditional and current cultural events. After completion of Korean 150a and 150b, students are expected to be able to participate in most formal and informal conversations on practical, social, professional, and abstract topics and read with almost complete comprehension and at normal speed expository prose on unfamiliar subjects and a variety of literary texts.
Prerequisite: Korean 140b or equivalent.

Korean 150b, Readings in Cultural Studies
Catalog Number: 1282
Sang-suk Oh
Half course (spring term). W., 3–6, with one additional hour to be arranged. EXAM GROUP: 8, 9
Continuation of Korean 150a.
Prerequisite: Korean 140b or equivalent.

Korea: History Courses

For Undergraduates and Graduates

Korean History 111, Traditional Korea
Catalog Number: 3709
Sun Joo Kim
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Survey of the history of Korea, from earliest times to the 19th century. Examines various interpretive approaches and issues in the political, social, economic, intellectual, cultural, and diplomatic history of premodern Korea.

Korean History 113, North Korea in Regional and Global Context - (New Course)
Catalog Number: 78737
Avram Asenov Agov
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
This course will examine the political, economic and social history of North Korea. Emphasis will be placed on a comparative understanding of North Korea’s place in East Asia and the international socialist system. The course aims at connecting the past and the present of the Korean peninsula. It explores the domestic and the international factors of Korea’s division and formation of two antagonistic societies.

Korean History 115, Korean History Through Film] - (New Course)
Catalog Number: 20477
Sun Joo Kim
Half course (fall term). M., 3–6. EXAM GROUP: 8, 9
This course is to examine history of Chôson Korea through select Korea’s contemporary feature films. Films and dramas with historical themes and personages have been very popular in Korea.
We will examine the content of the films, and investigate how “true” or “false” they represent Korea’s past, how they imagine and invent Korea’s past, in what ways films are useful in better understanding Korean history, people’s lives and practices.

Note: Expected to be given in 2013–14. A discussion section in the Korean language will be offered if enrollment is sufficient.

[Korean History 118. Social History of Premodern Korea]
Catalog Number: 3231
Sun Joo Kim
Half course (spring term). Tu., 1–3.
This seminar is designed to take a comprehensive look at social, political, cultural, and material lives of Chosôn Korea (1392-1910). The seminar will use "Confucianism" and diglossic culture as two main analytical tools to discuss changing political and intellectual culture, family structure and ritual practices, popular culture, gender, language and writing, perceptions of Korea, East Asia and the world, and conceptions of individual and national self.

Note: Expected to be given in 2013–14.

[Korean History 130. The Recurring Past--Early Korea and Northeast Asia as History and Identity]
Catalog Number: 40272
Mark Edward Byington
Half course (fall term). M., W., F., at 11.
With a focus on Korea’s proto-historic and early historic periods, this course will explore the question of history as shaper of identity, looking at the ways the remote past surfaces repeatedly in modern context. We will examine international disputes over historical interpretation, the popularization of the ancient past in popular culture, and the politicization of history in both North and South Korea.

Note: Expected to be given in 2013–14.

Cross-listed Courses

[Societies of the World 27 (formerly Historical Study A-75). The Two Koreas]

Primarily for Graduates

[Korean History 230r. Readings in Premodern Korean History]
Catalog Number: 4497
Sun Joo Kim
A study of social, political, economic, and intellectual history of premodern Korea reviewing major scholarship in the field. Designed primarily for graduate students preparing for the general examination. All readings are in English.

Note: Expected to be given in 2014–15.

Prerequisite: Korean History 111 or equivalent.
[Korean History 231ar. Documents and Research Methods for the Study of Premodern Korea I: Seminar]
Catalog Number: 56199
Sun Joo Kim
Half course (fall term). W., 1–3.
Introduction of the different types of primary sources and research methodologies useful for study of Chôson Korea. Students are required to write a research paper.
Note: Expected to be given in 2013–14.
Prerequisite: Korean History 111 or equivalent and reading proficiency in Korean. Reading ability in literary Chinese and Japanese helpful.

[Korean History 231b. Documents and Research Methods for the Study of Premodern Korea II: Seminar]
Catalog Number: 91032
Sun Joo Kim
Half course (spring term). W., 1–3.
Continued training in reading and interpreting primary sources and exploring innovative research methodologies. Students are required to write a research paper based on original sources on a topic of their choosing.
Note: Expected to be given in 2013–14.
Prerequisite: Korean History 231a or instructor’s permission.

Korean History 235r. Historical Research in Korea
Catalog Number: 7886
Sun Joo Kim
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Explores current historical research in the field of premodern Korea by reviewing major publications in the field in Korean.
Prerequisite: Korean History 111 or equivalent and proficiency in Korean.

Korean History 253r (formerly Korean History 253r). Modern Korean History: Proseminar
Catalog Number: 0365
Carter J. Eckert
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
An introduction to some of the current issues in modern Korean history through selected readings. Designed for entering graduate students and undergraduates with a basic knowledge of modern Korean History (Societies of the World 27, “Two Koreas” or its equivalent).

[*Korean History 255r. Modern Korean History: Seminar]
Catalog Number: 0713
Carter J. Eckert
Full course (indivisible). Th., 2–4.
Readings and research in modern Korean history. Students are required to write a seminar paper based largely on primary materials
Note: Expected to be given in 2013–14.

Prerequisite: Korean History 253r or equivalent, and reading proficiency in Korean.

**[Korean History 260r (formerly Korean History 260r). Readings in Modern Korean History I]**
Catalog Number: 5372
Carter J. Eckert
Half course (fall term). Th., 2–4.
Explores the history of the field through an examination of major scholarship. Designed primarily for graduate students preparing for the general examination.
Note: Expected to be given in 2013–14.

**[Korean History 261. Readings in Modern Korean History II]**
Catalog Number: 79753
Carter J. Eckert 1178 (on leave spring term)
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Continuation of Korean History 260. Designed primarily for graduate students preparing for the general examination.
Note: Expected to be given in 2013–14.

**[Korean History 270. Readings in Early Korean and Northeast Asian History: Seminar]**
Catalog Number: 55379
Mark Edward Byington
This course involves close readings in various topics related to early Korean History, reinforcing the view of early Korea as an active component in a very dynamic East Asian cultural matrix.
Note: Expected to be given in 2013–14.
Prerequisite: Reading proficiency in classical Chinese and one of either Korean, Chinese or Japanese.

**Korea: Literature Courses**

**For Undergraduates and Graduates**

**Korean Literature 110. Beyond the Ordinary: Exploring Yi Sang as Complete Artist - (New Course)**
Catalog Number: 27215
John Mark Frankl
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
The primary purpose of this course is to examine the entire oeuvre of the enigmatic Yi Sang (1910-1937). Though best known for his poetry and fiction, Yi was an artist who also produced award-winning paintings and rendered sketches to accompany his own literary works and the works of his most renowned peers. He was also an architect whose designs were acclaimed by his Korean peers and the Japanese colonial government alike. Finally, later in his career, Yi turned to the essay as a vehicle for expressing his musings on various aspects of 1930s Korea and Japan in a manner much more explicit and clear than in his other works.
Korean Literature 132. Korean Literature in Translation: Conference Course
Catalog Number: 7838
David McCann

Half course (spring term). Tu., Th., 1–2:30, additional evening screenings to be arranged.
EXAM GROUP: 15, 16

This course provides a comprehensive overview of Korean culture as it is represented in Korean fiction and poetry from pre-modern to contemporary period. It delves into the question of how Korea, as a society and nation, has responded to cultural transformations and changing conceptions of the land, the people, and the nation over time. The course highlights different genres of Korean literature from mythologies of Korea’s birth, literary works in Japanese written under Colonial Korea, to contemporary pop culture and literature in films. The concepts of state, gender, class, nostalgia, modernity, and revolutionary aesthetics will be at the forefront of our discussions.

Prerequisite: All readings will be in English. No prior knowledge of Korea or the Korean language is required.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 35. Forms in Korean Cultural History]

Primarily for Graduates

[Korean Literature 210r. Pre-Modern Korean Literature]
Catalog Number: 6342
David McCann

Half course (fall term). Th., 1–3.
Close reading in a number of literary forms, including the essay, histories, prose fiction, songs, poetry, and p’ansori.


Prerequisite: Korean Literature 132 or equivalent.

[Korean Literature 212. Modern Korean Poetry]
Catalog Number: 5627
David McCann

Half course (fall term). W., 1–3.
Major and minor voices in 20th and 21st-century Korean poetry. Attention to the practices of reading and translation, and to the political contexts of modern Korean poetry.


Prerequisite: Korean Literature 132 or equivalent.

Cross-listed Courses

[Comparative Literature 277. Literature and Diaspora]
*Korean 300. Reading and Research
Catalog Number: 8122
Carter J. Eckert 1178 (on leave spring term), Sun Joo Kim 3821, David McCann 3635 (on leave fall term), and Sang-suk Oh 3856

Manchu: Language Courses

For Undergraduates and Graduates

Manchu A. Elementary Manchu
Catalog Number: 8961
Mark C. Elliott
Introduction to Manchu grammar with elementary readings in Manchu script.

Manchu B. Elementary Manchu
Catalog Number: 1625
Mark C. Elliott
Readings in a variety of historical and literary texts with emphasis on Manchu documentary sources.

[Manchu 120a. Intermediate Manchu]
Catalog Number: 4190
Mark C. Elliott
Half course (fall term). Th., 3–5.
Readings in a wide variety of Manchu texts. English to Manchu translation exercises.
Note: Expected to be given in 2013–14.

[Manchu 120b. Advanced Manchu]
Catalog Number: 1414
Mark C. Elliott
Half course (spring term). Hours to be arranged.
Intensive reading in Manchu archival materials, other historical texts and literary texts. Some texts in pre-diacritical form. English to Manchu translation exercises.
Note: Expected to be given in 2013–14.

Primarily for Graduates

Manchu 210a. Introduction to Sources for Manchu Studies
Catalog Number: 5638
Mark C. Elliott
Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17
Introduces a range of Manchu and Chinese texts used for research in Manchu studies. After reviewing the history and present state of Manjuristics, we will consider different source materials each week. Students will present oral reports and write a bibliographic essay on a topic
of potential research interest.
**Prerequisite:** Ability in literary Chinese and Manchu, background in Qing history. Reading ability in Japanese strongly preferred but not required.

**[Manchu 210b. Introduction to Sources for Manchu Studies]**
Catalog Number: 4146  
Mark C. Elliott  
*Half course (fall term). Hours to be arranged.*  
Research papers prepared on the basis of primary sources.  
**Note:** Expected to be given in 2013–14.  
**Prerequisite:** Manchu 210a.

**Graduate Courses of Reading and Research**

*Manchu 300. Reading and Research*  
Catalog Number: 8735  
Mark C. Elliott 3329 (on leave fall term)

**Mongolian: Language Courses**

*For Undergraduates and Graduates*

**[Mongolian 120a. Intermediate Written Mongolian]**  
Catalog Number: 0810  
Mark C. Elliott  
*Half course (fall term). Hours to be arranged.*  
Readings in classical and modern Mongolian texts.  
**Note:** Expected to be given in 2013–14.

**[Mongolian 120b. Advanced Written Mongolian]**  
Catalog Number: 4032  
Mark C. Elliott  
*Half course (spring term). Hours to be arranged.*  
Continuation of Mongolian 120a.  
**Note:** Expected to be given in 2013–14.

**Graduate Courses of Reading and Research**

*Mongolian 300. Reading and Research*  
Catalog Number: 1345  
Mark C. Elliott 3329 (on leave fall term)

**Tibetan and Himalayan Studies**

**Tibetan History**
Cross-listed Courses

[Religion 1705 (Buddhism in Tibet). Tibetan Buddhism]
Tibetan 91r. Supervised Reading and Research
Tibetan 101a. Elementary Classical Tibetan
Tibetan 101b. Elementary Classical Tibetan
Tibetan 102a. Intermediate Classical Tibetan
Tibetan 102b. Intermediate Classical Tibetan
Tibetan 104ar. Elementary Colloquial Tibetan
Tibetan 104br. Elementary Colloquial Tibetan
Tibetan 105ar. Intermediate Colloquial Tibetan
Tibetan 106ar. Advanced Colloquial Tibetan
Tibetan 106br. Advanced Colloquial Tibetan
Tibetan 219r. Tibetan Religious Literature: Seminar
Tibetan 235. Introduction in reading traditional Tibetan archival (vig tshags) and government documents (gzhung vig)

*Tibetan 300. Reading and Research
*Tibetan 302. Direction of AM Theses

Uyghur: Language Courses

Primarily for Undergraduates

Uyghur 91r. Supervised Reading and Research - (New Course)
Catalog Number: 18572
Mark C. Elliott
Half course (fall term; repeated spring term). Hours to be arranged.
Independent reading and research in advanced Uyghur-language texts. May be repeated for credit.
Prerequisite: Uyghur 120B or permission of instructor.

For Undergraduates and Graduates

[Uyghur A. Elementary Uyghur]
Catalog Number: 8767
Mark C. Elliott
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
Introduction to Uyghur, the Turkic language spoken in China’s Xinjiang Uyghur Autonomous Region and throughout Central Asia. Course covers grammar, reading and writing (in the modified Arabic alphabet adopted in the PRC), and conversation practice.
Note: Expected to be given in 2015–16.

[Uyghur B. Elementary Uyghur]
Catalog Number: 5271
Mark C. Elliott
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Continuation of Uyghur A. Completion of basic Uyghur grammar, listening and speaking practice with the aid of audio-visual materials, selected readings from Uyghur literature and academic prose.

Note: Expected to be given in 2015–16.

**Uyghur 120A, Intermediate/Advanced Uyghur**
Catalog Number: 9312
Mark C. Elliott
Half course (fall term). Tu., Th., 8:30–10.
Additional training in modern Uyghur, with attention to improvement of spoken fluency and comprehension. Extensive readings in a range of genres, including historical writing and academic prose as well as religious texts.
Prerequisite: Uyghur B or permission of instructor.

**Uyghur 120B, Intermediate/Advanced Uyghur**
Catalog Number: 4234
Mark C. Elliott
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Continuation of Uyghur 120A.
Prerequisite: Uyghur 120A or permission of instructor.

**Graduate Courses of Reading and Research**

*Uyghur 300. Readings in Uyghur Language and Literature*
Catalog Number: 5357
Mark C. Elliott 3329 (on leave fall term)
Half course (fall term; repeated spring term). Hours to be arranged.
Guided readings in advanced Uyghur-language texts. May be repeated for credit.
Prerequisite: Uyghur 120B or permission of instructor.

**Vietnam: Language Courses**

**For Undergraduates and Graduates**

**Vietnamese Ba. Elementary Vietnamese**
Catalog Number: 3873
Binh Ngo
Half course (fall term). M. through F., at 9. EXAM GROUP: 2, 11
Surveys the fundamentals of Vietnamese phonetics, grammar, and vocabulary to provide students with basic ability to understand, speak, read, and write Vietnamese. Conversational ability is stressed through an interactive, communication-oriented approach.

**Vietnamese Bb. Elementary Vietnamese**
Catalog Number: 9940
Binh Ngo
Half course (spring term). M. through F., at 9. EXAM GROUP: 2, 11
Continuation of Vietnamese Ba, with introduction of additional Vietnamese texts and excerpts from Vietnamese newspapers to enhance reading skills.
*Prerequisite:* Vietnamese Ba or permission of the instructor.

**Vietnamese 120a. Intermediate Vietnamese**
Catalog Number: 3276
* Binh Ngo
* Half course (fall term). *Lecture M., 4-6, Drill W., 4-6.*
Further development of speaking, reading, writing, and aural comprehension. Texts and dialogues on Vietnamese geography, history, culture, and customs will be used, as well as audiotapes and videos. Students are expected to speak Vietnamese in all class discussions.
*Note:* Conducted entirely in Vietnamese.
*Prerequisite:* Vietnamese Bb or permission of instructor.

**Vietnamese 120b. Intermediate Vietnamese**
Catalog Number: 6178
* Binh Ngo
* Half course (spring term). *M., W., 4-6, and one additional hour to be arranged. EXAM GROUP: 9*
Continuation of Vietnamese 120a.
*Note:* Conducted entirely in Vietnamese.
*Prerequisite:* Vietnamese 120a or permission of instructor.

**Vietnamese 130a. Advanced Vietnamese**
Catalog Number: 6287
* Binh Ngo
* Half course (fall term). *Lecture T., 3-5, Drill Th., 3-5. EXAM GROUP: 17*
Development of high proficiency in Vietnamese. Introduction of complex grammar and vocabulary, using authentic Vietnamese texts, videos, and translation of English news articles into Vietnamese. Discussions focus on selected short stories and poems.
*Note:* Conducted entirely in Vietnamese.
*Prerequisite:* Vietnamese 120b or permission of instructor.

**Vietnamese 130b. Advanced Vietnamese**
Catalog Number: 3968
* Binh Ngo
* Half course (spring term). *Tu., Th., 3-5, and one additional hour to be arranged. EXAM GROUP: 17, 18*
Continuation of Vietnamese 130a.
*Note:* Conducted entirely in Vietnamese.
*Prerequisite:* Vietnamese 130a or permission of instructor.

**Vietnamese 140a. Advanced-High Vietnamese**
Catalog Number: 97175
* Binh Ngo
* Half course (fall term). *M., W., 2:30–4.*
Development of near-native fluency in oral and written expression. Modern Vietnamese literature, including short stories, excerpts from novels, and poems in the original, that were published in Vietnam from the 1930s to the present day is used to introduce the complex grammar, idioms, proverbs and some slang expressions commonly used in contemporary Vietnamese. Discussion focuses on Vietnamese culture and issues related to Vietnamese society during that period.

Prerequisite: Vietnamese 130b

**Vietnamese 140b. Advanced-High Vietnamese**

Catalog Number: 45653

Binh Ngo


Continuation of Vietnamese 140a.

Prerequisite: Vietnamese 140a

**Vietnam: History Courses**

**Cross-listed Courses**

[*History 76f (formerly History 1618). Telling Lives in Asia*

History 1619. Premodern Vietnam

History 1620. Modern Vietnam


**Graduate Courses of Reading and Research**

*Vietnamese 300. Reading and Research*

Catalog Number: 7211

Binh Ngo 1383

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**Economics**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

**Faculty of the Department of Economics**

N. Gregory Mankiw, Robert M. Beren Professor of Economics (*Chair*)

Philippe Aghion, Robert C. Waggoner Professor of Economics

Alberto F. Alesina, Nathaniel Ropes Professor of Political Economy (*on leave 2012-13*)
Pol Antràs, Professor of Economics
Susan Athey, Professor of Economics *(on leave fall term)*
Robert J. Barro, Paul M. Warburg Professor of Economics *(on leave 2012-13)*
Effraim Benmelech, Frederick S. Danziger Associate Professor of Economics
John Y. Campbell, Morton L. and Carole S. Olshan Professor of Economics, Harvard College Professor *(on leave 2012-13)*
Gary Chamberlain, Louis Berkman Professor of Economics *(on leave 2012-13)*
Eric Chaney, Assistant Professor of Economics *(on leave 2012-13)*
Raj Chetty, Affiliate of the Department of Statistics, Professor of Economics
Richard N. Cooper, Maurits C. Boas Professor of International Economics
David M. Cutler, Otto Eckstein Professor of Applied Economics *(on leave 2012-13)*
David Dorn, Visiting Professor of Economics
Christian Paul Edmond, Visiting Professor of Economics
Stanley Engerman, Visiting Professor of Economics *(University of Rochester)*
Emmanuel Farhi, Professor of Economics
Martin Feldstein, George F. Baker Professor of Economics
Christopher L. Foote, Professor of the Practice of Economics
Richard B. Freeman, Herbert S. Ascherman Professor of Economics
Benjamin M. Friedman, William Joseph Maier Professor of Political Economy *(on leave fall term)*
Roland G. Fryer, Robert M. Beren Professor of Economics
Drew Fudenberg, Frederic E. Abbe Professor of Economics
Alan M. Garber, Professor of Economics *(FAS), Professor of Public Policy (Kennedy School), and Provost*
Edward L. Glaeser, Fred and Eleanor Glimp Professor of Economics
Claudia Goldin, Henry Lee Professor of Economics
Gita Gopinath, Professor of Economics *(Director of Graduate Studies)*
Jerry R. Green, David A. Wells Professor of Political Economy
Oliver S. Hart, Andrew E. Furer Professor of Economics
Elhanan Helpman, Galen L. Stone Professor of International Trade *(on leave spring term)*
Stefan Hoderlein, Visiting Professor of Economics
Richard A. Hornbeck, Assistant Professor of Economics
Rustam Ibragimov, Associate Professor of Economics
Guido W. Imbens, Professor of Economics
David William Johnson, Senior Preceptor
Dale W. Jorgenson, Samuel W. Morris University Professor *(on leave 2012-13)*
Maximilian Kasy, Assistant Professor of Economics
Lawrence F. Katz, Elisabeth Allison Professor of Economics
Hans-helmut Kotz, Visiting Lecturer on Economics
Michael R. Kremer, Gates Professor of Developing Societies
David I. Laibson, Robert I. Goldman Professor of Economics, Harvard College Professor
Owen A. Lamont, Visiting Lecturer on Economics
Gregory M. Lewis, Associate Professor of Economics
Stephen A. Marglin, Walter S. Barker Professor of Economics
Eric S. Maskin, Adams University Professor
James L. Medoff, Meyer Kestnbaum Professor of Labor and Industry
Marc J. Melitz, David A. Wells Professor of Political Economy
Jeffrey A. Miron, Senior Lecturer on Economics (Director of Undergraduate Studies)
Sendhil Mullainathan, Professor of Economics
Nathan J. Nunn, Professor of Economics
Ariel Pakes, Thomas Professor of Economics
Amanda D. Pallais, Assistant Professor of Economics
Jonathan Parker, Visiting Professor of Economics
Adriano Rampini, Visiting Professor of Economics
Kenneth Rogoff, Thomas D. Cabot Professor of Public Policy
Alvin E. Roth, George Gund Professor of Economics and Business Administration, George
Gund Professor of Economics and Business Administration, Emeritus (on leave fall term)
Amartya Sen, Lamont University Professor
Andrei Shleifer, Professor of Economics (on leave 2012-13)
Alp Simsek, Assistant Professor of Economics
Jeremy C. Stein, Moise Y. Safra Professor of Economics (on leave 2012-13)
James H. Stock, Harold Hitchings Burbank Professor of Political Economy (on leave 2012-13)
Tomasz Strzalecki, Assistant Professor of Economics (on leave 2012-13)
Lawrence H. Summers, Charles W. Eliot University Professor
William L. Thomson, Visiting Professor of Economics
Martin L. Weitzman, Professor of Economics
Rainer Winkelmann, Visiting Professor of Economics

Other Faculty Offering Instruction in the Department of Economics

Alberto Abadie, Professor of Public Policy at the John F. Kennedy School of Government
(Kennedy School)
Mikael Adolphson
Attila Ambrus
Nava Ashraf, Associate Professor (Business School)
George Pierce Baker, Herman C. Krannert Professor of Business Administration (Business
School)
Adam Gregory Beaver
Lucian A. Bechuk, William J Friedman and Alicia Townsend Friedman Professor of Law,
Economics, and Finance (Law School)
George J. Borjas, Robert W. Scrivner Professor of Economics and Social Policy at the John F.
Kennedy School of Gov’t (Kennedy School)
Amitabh Chandra, Professor of Public Policy (Kennedy School)
Shawn Cole, Associate Professor (Business School)
Peter Coles, Assistant Professor (Business School)
Ulrich Doraszelski
Benjamin Edelman, Associate Professor (Business School)
Erica M. Field
Guenther Fink, Assistant Professor of International Health Economics (Public Health)
Kiran Gajwani
Paul Gompers, Eugene Holman Professor of Business Administration (Business School)
Rema N. Hanna, Assistant Professor of Public Policy at the John F. Kennedy School of
Government (Kennedy School)
Samuel Gregory Hanson, Assistant Professor (Business School)
Caroline M. Hoxby
Julian Jamison, Adjunct Lecturer in Public Policy (Kennedy School)
Robert T. Jensen, Associate Professor of Public Policy at the John F. Kennedy School of Government (Kennedy School)
S. Deborah Kang
Louis E. Kaplow, Finn M. W. Caspersen and Household International Professor of Law and Economics (Law School)
Asim I. Khwaja, Sumitomo-FASID Professor of International Finance and Development (Kennedy School)
Elon Kohlberg, Royal Little Professor of Business Administration (Business School)
Maciej Henryk Kotowski, Assistant Professor of Public Policy (Kennedy School)
Joshua Lerner, Jacob H. Schiff Professor of Investment Banking (Business School)
Jeffrey B. Liebman, Malcolm Wiener Professor of Public Policy at the John F. Kennedy School of Government (Kennedy School)
Gerard Livesey, Visiting Professor of History (University of Sussex)
Markus M. Möbius
Marcelo J. Moreira
Julie H. Mortimer
Joseph P. Newhouse, John D. MacArthur Professor of Health Policy and Management (Kennedy School, Medical School, Public Health)
Rohini Pande, Mohamed Kamal Professor of Public Policy (Kennedy School)
Gabriel Paquette
Dwight H. Perkins, Harold Hitchings Burbank Professor of Political Economy, Emeritus
Jack R. Porter
Adriano Rampini, Visiting Professor of Economics
James Robinson, David Florence Professor of Government
Dani Rodrik, Rafiq Hariri Professor of International Political Economy at the John F Kennedy School Government (Kennedy School)
David S. Scharfstein, Edmund Cogswell Converse Professor of Finance and Banking (Business School)
Michael A. Schwarz
David Smith (Wilfrid Laurier University)
Jeff Snyder-Reinke, Visiting Assistant Professor of History (The College of Idaho)
Robert N. Stavins, Albert Pratt Professor of Business and Government at the John F Kennedy School of Government (Kennedy School)
Aditya Vikram Sunderam, Assistant Professor (Business School)
Carol Symes
Trygve Van Regenmorter Throntveit
Aleh Tsyvinski
Daniel Corbett Wewers
Jeffrey G. Williamson, Laird Bell Professor of Economics, Emeritus
Cassandra Pattanayak, College Fellow in Statistics, Lecturer on Economics
Richard J. Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy in the John F Kennedy School of Government (Kennedy School)
Affiliates of the Department of Economics

Tutorials, Junior Seminars, and Senior Thesis Seminars in Economics

Primarily for Undergraduates

*Economics 910r. Supervised Reading and Research
Catalog Number: 1020
Jeffrey A. Miron
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading leading to a long term paper on a topic or topics not covered by regular courses.
Note: Does not count for concentration credit and may not be taken Pass/Fail. Requires signatures of the adviser and of the Director of Undergraduate Studies. Application available at the Economics Undergraduate Office at Littauer Center, North Yard.

*Economics 970. Tutorial — Sophomore Year
Catalog Number: 7923
Jeffrey A. Miron
A series of small seminars taught in section focusing on applications of economic theory to real problems.
Note: One term required of all Economics concentrators. Enrollment limited to concentrators.
Prerequisite: Both terms of Social Analysis 10 (or equivalent); Statistics 100, 104, or 110; Economics 1010a1, 1010a2, or 1011a; and, current enrollment in Economics 1010b or 1011b.

*Economics 975 (formerly *Economics 980). Tutorial — Theory Review
Catalog Number: 3281
Jeffrey A. Miron
Half course (fall term; repeated spring term). Hours to be arranged.
A thorough review of intermediate microeconomics and macroeconomics.
Note: Required of and limited to concentrators who received below a B-/C+ average in the Economics 1010/1011 sequence.

Economics 980 Junior Seminars

Junior seminars are lotteried the week before classes start and are restricted to economics concentrators in their junior year. Each course will be limited to 18 students. Please see the Undergraduate Program section of the Economics Department website for instructions on how and when to lottery. Other interested students may apply in person during the first week of classes to the Undergraduate Program Administrator located in Room 113 Littauer Center - North Yard.

*Economics 980b. Education in the Economy
Catalog Number: 1581 Enrollment: Course may be lotteried.
Lawrence F. Katz and Claudia Goldin
*Economics 980q. Economics Design Lab
Catalog Number: 7220
Sendhil Mullainathan
This class offers a chance for students to see how social science insights (economics, finance and psychology) can be used to design policies and products that solve important problems. This class offers a chance for students use insights from behavioral economics to design solutions to important and/or interesting problems. Each student will be asked to pick one concrete problem and craft a solution. Some students may focus on designing behaviorally informed policy solutions to problems such as unemployment insurance. Others may focus on designing new products for everything from personal finance to healthy eating; products might be apps, financial vehicles or something more exotic. Others may focus on problems closer to home such as devising a way to keep students (themselves) from cramming. The emphasis in all these cases will be on (i) use of behavioral insights and (ii) practical implementability of the solution. Students will take the problem as far as the implementation cycle as the class and their design will allow.
Note: Students with non-economic backgrounds (such as psychology or engineering) are particularly encouraged to take the course. Some familiarity with behavioral economics (1030, 1035) is valuable but knowledge of psychology from other classes is a substitute.

*Economics 980u. Immigration Economics
Catalog Number: 87839
George J. Borjas (Kennedy School)
There has been a resurgence of international migration in the past few decades. This course explores the economic determinants and consequences of these population flows. Specific topics include the study of how immigrants are non-randomly selected from the population of the sending countries, the measurement of assimilation in the receiving country, the impact on the labor markets of both receiving and sending countries, and the calculation of the economic benefits from immigration.

*Economics 980x. Economics of Work and Family - (New Course)
Catalog Number: 13231 Enrollment: Course may be lotteried.
Claudia Goldin
How are the most personal choices and life transitions decided? When and whom do you marry, how many children do you have, how much education should you obtain, and which careers or jobs will you pursue? Much will be explored in terms of change over time, particularly
concerning the economic emergence of women and the growing role of government. Readings draw on economic theory, empirical analyses, history, and literature from the 19th century to the present.

*Economics 980y. The Economy of China - (New Course)*  
Catalog Number: 23151 Enrollment: Limited to 18.  
Richard N. Cooper  
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8  
This course critically examines China’s remarkable economic performance since 1980 and places this performance in comparative context. Topics covered include China’s economic structure, institutions, inequality, trade, population, and public policy.

Economics 985 Senior Thesis Seminars

These seminars are limited to seniors writing senior honor theses. Each seminar focuses on the research topics of interest to the participants. Emphasis is placed on research design, methodological problems, literature review, and sources of data. Regular student presentations of work in progress are required. An Economics 985 seminar taken in the senior year substitutes for Economics 990, and seniors will not be allowed to enroll concurrently in both courses. All 985 seminars are limited to 16 students.

*Economics 985l. Research in Development and Health Economics - (New Course)*  
Catalog Number: 94962  
Kiran Gajwani  
Full course. Hours to be arranged.  
Workshop for seniors writing theses in international trade and finance. Emphasis on choice of research topics, methodology, and data sources. Written and oral presentations of work in progress leading toward completion of a major research paper or senior honors thesis are required.

*Economics 985m. Research in Labor and Public Finance - (New Course)*  
Catalog Number: 23048  
Jeffrey A. Miron  
Full course. Hours to be arranged.  
Workshop for seniors writing theses in international trade and finance. Emphasis on choice of research topics, methodology, and data sources. Written and oral presentations of work in progress leading toward completion of a major research paper or senior honors thesis are required.

*Economics 985n. Research in Applied Microeconomics - (New Course)*  
Catalog Number: 43294  
Jeffrey A. Miron  
Full course. Hours to be arranged.  
Workshop for seniors writing theses in international trade and finance. Emphasis on choice of research topics, methodology, and data sources. Written and oral presentations of work in
progress leading toward completion of a major research paper or senior honors thesis are required.

*Economics 985o. Research in Macro and International Economics - (New Course)
Catalog Number: 98646
Richard N. Cooper
Full course. Hours to be arranged.
Workshop for seniors writing theses in international trade and finance. Emphasis on choice of research topics, methodology, and data sources. Written and oral presentations of work in progress leading toward completion of a major research paper or senior honors thesis are required.

*Economics 985p. Research in Finance, Behavioral, and Experimental Economics - (New Course)
Catalog Number: 26105
Jeffrey A. Miron
Full course. Hours to be arranged.
Workshop for seniors writing theses in international trade and finance. Emphasis on choice of research topics, methodology, and data sources. Written and oral presentations of work in progress leading toward completion of a major research paper or senior honors thesis are required.

*Economics 990. Tutorial — Senior Year
Catalog Number: 7342
Jeffrey A. Miron and members of the Department
Full course. Hours to be arranged.
For students writing a senior thesis out of sequence.
Note: Students who are writing a senior thesis out of sequence (i.e., beginning in the spring) must enroll in Economics 990 in the spring and complete the course in the fall. Students must write a 25-page paper at the end of the first term of Economics 990. Students currently enrolled in Economics 985 may not enroll in Economics 990.

General Economics; Economic Theory; History of Economics

For Undergraduates and Graduates

Economics 10 (formerly Social Analysis 10). Principles of Economics
Catalog Number: 3660
N. Gregory Mankiw, and members of the Department
Full course. M., W., F., at 12. Sections also meet at 9, 10, 11, 12, 1, or 2. EXAM GROUP: 5
Introduction to economic issues and basic principles and methods of economics. Fall term focuses on microeconomics: how markets work, market efficiency and market failure, firm and consumer behavior, and policy issues such as taxation, international trade, the environment, and the distribution of income. Spring term focuses on macroeconomics: economic growth, inflation, unemployment, the business cycle, the financial system, international capital flows and trade imbalances, and the impact of monetary and fiscal policy.
Note: Microeconomics (taught in the fall term) is a prerequisite for macroeconomics (taught in the spring term). Students may elect to take only the fall microeconomics course and receive a half-course credit. Taught in a mixture of lectures and small sections. No calculus is used, and there is no mathematics background requirement. Designed for both potential Economics concentrators and those who plan no further work in the field. The Department of Economics strongly encourages students considering concentration to take the full-year course in their freshman year. This is a required course for all economics concentrators and a prerequisite for higher level courses in economics. This course, when both semesters are taken for a letter grade, meets the General Education requirement for either Empirical and Mathematical Reasoning or United States in the World, but not both. This course, when either semester is taken for a letter grade, meets the Core area requirement for Social Analysis. Students may not take both Social Analysis 10 and Economics 10 for credit.

**Economics 1010a1. Microeconomic Theory - (New Course)**
Catalog Number: 58552
Jeffrey A. Miron
Half course (fall term). M., W., F., at 10, and a one-hour weekly section to be arranged. EXAM GROUP: 3
Focuses on the optimizing behavior of individual consumers and firms and coordination of individual decisions through markets, including the evaluation of market outcomes.

Note: Econ 1010a1 is the same as Economics 1010a2; only one may be taken for credit. Economics 1010a1 fulfills the intermediate microeconomic theory requirement for Economics concentrators. Students may take either Economics 1010a1 or Economics 1011a for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis.
**Prerequisite:** Economics 10 and Mathematics 1a or their equivalents.

**Economics 1010a2. Microeconomic Theory - (New Course)**
Catalog Number: 73659
Marc J. Melitz
Half course (fall term). Tu., Th., 10–11:30; . EXAM GROUP: 12, 13
Focuses on the optimizing behavior of individual consumers and firms and coordination of individual decisions through markets, including the evaluation of market outcomes.

Note: Econ 1010a2 is the same as Economics 1010a1; only one may be taken for credit. Economics 1010a2 fulfills the intermediate microeconomic theory requirement for Economics concentrators. Students may take either Economics 1010a2 or Economics 1011a for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis.
**Prerequisite:** Economics 10 and Mathematics 1a or their equivalents.

**Economics 1010b. Macroeconomic Theory**
Catalog Number: 2924
Christopher L. Foote
Half course (spring term). M., W., F., at 9, and a one-hour weekly section to be arranged. EXAM GROUP: 2
Theories and evidence on economic growth and fluctuations. Determination of gross domestic
product, investment, consumption, employment, and unemployment. Analysis of interest rates, wage rates, and inflation. Roles of fiscal and monetary policies.

Note: Economics 1010b fulfills the intermediate macroeconomic theory requirement for Economics concentrators. Students may take either Economics 1010b or Economics 1011b for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis.

Prerequisite: Social Analysis 10. While no specific mathematics course is required, knowledge of calculus at the level of Mathematics 1a is assumed.

**Economics 1011a. Microeconomic Theory**

Catalog Number: 7230

Edward L. Glaeser

*Half course (fall term). Tu., Th., 11:30-1. EXAM GROUP: 13, 14*

Economics 1011a is similar to Economics 1010a, but more mathematical and covers more material. The course teaches the basic tools of economics and to apply them to a wide range of human behavior.

Note: Economics 1011a fulfills the intermediate microeconomic theory requirement for Economics concentrators. Students may take either Economics 1010a or Economics 1011a for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis.

Prerequisite: Mathematics 21a or permission of the instructor.

**Economics 1011b. Macroeconomic Theory**

Catalog Number: 6993

Philippe Aghion and David I. Laibson

*Half course (spring term). Tu., Th., 10-11:30, and a one-hour weekly section to be arranged. EXAM GROUP: 12, 13*

The same topics as in 1010b, but with a more mathematical approach.

Note: Economics 1011b fulfills the intermediate macroeconomic theory requirement for Economics concentrators. Students may take either Economics 1010b or Economics 1011b for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Social Analysis.

Prerequisite: Economics 1011a, Mathematics 21a, or permission of the instructor.

**[Economics 1017. A Libertarian Perspective on Economic and Social Policy]**

Catalog Number: 1197 Enrollment: Limited to 200.

Jeffrey A. Miron

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Analyses the libertarian perspective on economic and social policy. This perspective differs from both liberal and conservative views, arguing for minimal government in most arenas. Policies addressed include drug prohibition, gun control, and public education.

Note: Expected to be given in 2013–14. Analyses the libertarian perspective on economic and social policy. This perspective differs from both liberal and conservative views, arguing for minimal government in most arenas. Policies addressed include drug prohibition, gun control, public education, abortion rights, gay marriage, income redistribution, and campaign finance regulation.
**Prerequisite:** Social Analysis 10, or Economics 10 (fall term) and concurrent enrollment in Economics 10 (spring term).

**[Economics 1018. Cultural Economics]**
Catalog Number: 1775
Alberto F. Alesina

*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Explores the importance of culture on economic outcomes, focusing on how heterogeneity of preferences affects economic choices and where those differences come from. Theoretical topics include group identity, social interactions and networks, evolutionary selection.

*Note:* Expected to be given in 2013–14. Explores the importance of culture on economic outcomes, focusing on how heterogeneity of preferences affects economic choices and where those differences come from. Theoretical topics include group identity, social interactions and networks, evolutionary selection, the importance of the family. Empirical applications include international investment, savings, occupational choices, ethical norms, economic development, fertility decisions.

*Prerequisite:* Economics 1010a1, 1010a2, or 1011a, and Economics 1123.

**[Economics 1030. Psychology and Economics]**
Catalog Number: 4709 Enrollment: Limited to 100.
David I. Laibson and Tomasz Strzalecki

*Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*

Psychological concepts include social preferences, impulsivity, bounded rationality, loss-aversion, over-confidence, self-serving biases, hedonics, and neuroscience. Economic concepts include arbitrage, equilibrium, rational choice, utility maximization, Bayesian beliefs, game theory.

*Note:* Expected to be given in 2013–14. Psychological concepts include social preferences, impulsivity, bounded rationality, loss-aversion, over-confidence, self-serving biases, hedonics, and neuroscience. Economic concepts include arbitrage, equilibrium, rational choice, utility maximization, Bayesian beliefs, game theory. Integrates these psychological and economic concepts to understand behavioral phenomena such as portfolio choice, saving, procrastination, addiction, asset pricing, auction bidding, labor supply, cooperation, persuasion.

*Prerequisite:* Social Analysis 10 and knowledge of univariate calculus.

**[Economics 1032. The Packing Problem: The Behavioral Economics of Scarcity]**
Catalog Number: 48309
Sendhil Mullainathan

*Half course (fall term). Hours to be arranged.*

Why do highly successful people have a rush of energy and get things done at the last minute? Why didn’t they have that rush earlier? Why does poverty persist around the world? Why is obesity rampant? This course argues that all these questions can be understood by understanding the behavioral economics of scarcity. The lectures will span concepts from mathematics of computation, psychology, evolutionary biology to numerous economic applications.

*Note:* Expected to be given in 2013–14. A research paper is required. This course meets the concentration writing requirement.
**Prerequisite:** Social Analysis 10, an introductory course in Psychology, and Statistics 100, 101 or 104.

**[Economics 1051. Introduction to Game Theory]**

*Catalog Number: 3692*

*Drew Fudenberg*

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Presents an introduction to the modern game theory, focusing on its use in economics. Main ideas of game theory are introduced and illustrated using examples from industrial organization, labor economics, and macroeconomics.

*Note:* Expected to be given in 2013–14. Students may not take both Economics 1051 and Economics 1052 for credit.

*Prerequisite:* Economics 1010a1, 1010a2, or 1011a.

**Economics 1052. Game Theory and Economic Applications**

*Catalog Number: 2634*

*Drew Fudenberg*

*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Introduction to game theory and its economic applications with more rigor than in Economics 1051. Topics include extensive-form and strategic-form games, Nash equilibrium, subgame-perfect equilibrium, Bayesian equilibrium, and applications to long-term cooperation, auctions, bargaining, and mechanism design.

*Note:* Students may not take both Economics 1051 and Economics 1052 for credit.

*Prerequisite:* Economics 1010a1, 1010a2, or 1011a and Mathematics 21a or permission of the instructor.

**[Economics 1056. Market Design]**

*Catalog Number: 69207 Enrollment: Limited to 40.*

*Susan Athey*

*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

This course studies the design of organized markets, focusing on efficient organization and the incentives created by market rules. Applications include online auction markets, government auctions of natural resources, procurement auctions, matching markets (students to classes or schools, medical residents to hospitals, kidneys to recipients). The analysis relies on a mix of documenting the rules of real-world markets, game theoretic analysis, empirical analysis, and experimental work. A research paper is optional with advance permission of instructor.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Economics 1011a and either 1051, 1052, 1060, 1070, 1640, or 1641, or permission of instructor.

**[Economics 1059 (formerly Theories of Decisionmaking in Economics). Decision Theory]**

*Catalog Number: 1322*

*Tomasz Strzalecki*

*Half course (spring term). M., W., 1-2:30, and a weekly section to be arranged.*

An introduction to formal models of decision making in economics, including both classical and psychologically-motivated approaches. Topics include risk, uncertainty, ambiguity, and
temptation.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Economics 1010a1, 1010a2, or 1011a and Mathematics 21a.

**Economics 1060. Contracts and Organizations**  
Catalog Number: 3267  
*Oliver S. Hart*  
Half course (spring term). M., W., 2:30–4; Th., at 3. EXAM GROUP: 7, 8  
Explores theoretical and empirical work on incentive problems within and between organizations (with more emphasis on the theory). Topics include agency problems arising from moral hazard and asymmetric information, team problems, career concerns, relational contracts, incomplete contracts, boundaries of the firm, authority and delegation, financial contracting, public ownership.  
*Note:* This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.  
*Prerequisite:* Economics 1010a1, 1010a2, or 1011a, Mathematics 20.

**[Economics 1070. Normative Economics]**  
Catalog Number: 5972  
*Jerry R. Green*  
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3  
Voting theory, social choice, mechanism design, bargaining theory, cooperative game theory, equitable cost allocation, fair division, welfare analysis of taxation, public expenditures and risk bearing. This course offers a rigorous approach to normative economics. Students should have an interest and ability to work with abstract mathematics and axiomatic reasoning.  
*Note:* Expected to be given in 2013–14. Optional writing Requirement: This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.  
*Prerequisite:* Mathematical sophistication and interests in abstract reasoning is required, but there are no specific prerequisites.

**[Economics 1776. Religion and the Rise of Capitalism]**  
Catalog Number: 30419  
*Benjamin M. Friedman*  
Half course (fall term). M., W., F., at 10 and a review section to be arranged. EXAM GROUP: 3  
Examines the influence of religious thinking on the intellectual revolution, associated with Adam Smith and others, that created economics as we know it as an independent discipline; also examines how the lasting resonances from these early religious influences continue to shape discussion of economic issues and debates about economic policy down to our own day.  
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.  
*Prerequisite:* Social Analysis 10.
Economics 1936. Keynes
Catalog Number: 14325
Stephen A. Marglin
Half course (fall term). Tu., Th., 4–6. EXAM GROUP: 3, 5, 13, 18
This course explores the birth, death, and resurrection of The General Theory of Employment, Interest and Money from the Great Depression (1929-1939) to the Great Recession (2008-?). A major goal is to lay out a coherent argument that, for all its theoretical innovation, The General Theory did not deliver: the argument why a market system, even an idealized system with all of the warts removed, may fail to provide jobs for willing workers. In the process we will examine the orthodoxy that Keynes attacked and that resurfaced in the 1960s and 70s; the key concepts underlying the models implicit in The General Theory; and the attempts of the Keynesian mainstream to make peace with both Keynes and orthodoxy. We will also explore the applicability of The General Theory to the long run. A final section will view the present economic difficulties through a Keynesian lens.
Prerequisite: Introductory economics at the level of Economics 10 or United States in the World 17; a year of college calculus allowing students to understand mathematical notation and concepts (derivatives, maximization, etc.) even though mathematics will be used very sparingly.

Primarily for Graduates

Economics 2001. Research in Behavior in Games and Markets
Catalog Number: 8732
David I. Laibson 1241, Drew Fudenberg 3460, Jerry R. Green 1539, and Tomasz Strzalecki 6294 (on leave 2012-13)
Full course (indivisible). W., 11:30–1. EXAM GROUP: 4, 5
Presents current research in the Behavioral and Experimental Economics field.

Economics 2005hf. Research in Contracts and Organizations
Catalog Number: 11493
Oliver S. Hart 3462
Half course (throughout the year). Tu., at 12. EXAM GROUP: Fall: 14
Participants discuss recent research in contracts and organizations and present their own work in progress. Open to doctoral students in economics.

*Economics 2010a. Economic Theory
Catalog Number: 8656
Edward L. Glaeser and Eric S. Maskin
Half course (fall term). Tu., Th., 10-11:30, and a 90-minute weekly section to be arranged. EXAM GROUP: 12, 13
Covers the theory of individual and group behavior. Topics include consumer theory, producer theory, behavior under uncertainty, externalities, monopolistic distortions, game theory, oligopolistic behavior, and asymmetric information.
Note: Enrollment is limited to students in the Economics and Business Economics PhD programs.
Prerequisite: Mathematics 116 or equivalent; can be taken concurrently.
**Economics 2010b, Economic Theory**  
Catalog Number: 8659  
Oliver S. Hart and Jerry R. Green  
Half course (spring term). Tu., Th., 10-11:30, and a 90-minute weekly section to be arranged. **EXAM GROUP: 12, 13**  
Topics include social choice theory, signaling, mechanism design, general equilibrium, the core, externalities, and public goods.  
**Prerequisite:** Economics 2010a.

**Economics 2010c, Economic Theory**  
Catalog Number: 4431  
David I. Laibson and Philippe Aghion  
Half course (fall term). Tu., Th., 1-2:30, and a 90-minute weekly section to be arranged. **EXAM GROUP: 15, 16**  
Topics include discrete-time and continuous-time dynamic programming, consumption, investment, economic growth, and business cycles.  
**Note:** Enrollment is strictly limited to PhD students in the Economics Department, Business Economics program, and PEG program. Qualified Harvard undergraduates may also enroll. No other students may take the course for credit or as auditors.

**Economics 2010d, Economic Theory**  
Catalog Number: 2041  
Emmanuel Farhi and Kenneth Rogoff  
Half course (spring term). M., W., 8:30-10, and a 90-minute section to be arranged. **EXAM GROUP: 1, 2**  
A basic course in graduate macroeconomics, including models of business fluctuations, analyses of monetary and fiscal policy, and introduction to open economy macroeconomic issues.  
**Note:** Enrollment is strictly limited to PhD students in the Economics Department, Business Economics program, and PEG program. Qualified Harvard undergraduates may also enroll. No other students may take the course for credit or as auditors.  
**Prerequisite:** Mathematics 116 or the equivalent; can be taken concurrently.

**Economics 2020a, Microeconomic Theory I**  
Catalog Number: 0339 Enrollment: Limited to 102.  
Maciej Kotowski  
Half course (fall term). M., W., 8:30-10 and a weekly section to be arranged. **EXAM GROUP: 1, 2**  
A comprehensive course in economic theory designed for doctoral students in all parts of the university. Topics include consumption, production, behavior toward risk, markets, and general equilibrium theory. Also looks at applications to policy analysis, business decisions, industrial organization, finance, and the legal system. Undergraduates with appropriate background are welcome, subject to the instructor’s approval.  
**Note:** Students may receive credit for both API-111 and API-101/API-105 only if API-101/105 is taken first. API-111 and API-109 cannot both be taken for credit. Also offered by Harvard Kennedy School as API-111 and by the Business School as HBS 4010. Please note that the first day of class for this course will be on Friday, September 7, at the regular meeting time, 8:30 a.m.
- 10 a.m., and the regular HKS classroom, L-140.

*Economics 2020b. Microeconomic Theory II*
Catalog Number: 4058
*Christopher N. Avery (Kennedy School) and Elon Kohlberg (Business School)*
Half course (spring term). M., W., 8:30-10 and a weekly section to be arranged. EXAM GROUP: 1, 2
A continuation of Economics 2020a. Topics include game theory, economics of information, incentive theory, and welfare economics.
*Note:* Offered jointly with the Kennedy School as API-112 and with the Business School as 4011.
*Prerequisite:* Economics 2010a or 2020a.

**Economics 2030. Psychology and Economics**
Catalog Number: 3828
*David I. Laibson and Sendhil Mullainathan*
Half course (fall term). W., 1-3. EXAM GROUP: 6, 7
Explores economic and psychological models of human behavior. Topics include bounded rationality, intertemporal choice, decision making under uncertainty, inference, choice heuristics, and social preferences. Economic applications include asset pricing, corporate finance, macroeconomics, labor, development, and industrial organization.
*Note:* Primarily for graduate students but open to undergraduates.
*Prerequisite:* Knowledge of multivariable calculus and econometrics.

[**Economics 2040. Experimental Economics**]
Catalog Number: 8485 Enrollment: Limited to 48.
*Instructor to be Determined*
Half course (spring term). Hours to be arranged.
An introduction to experimental economics, and some of the major subject areas that have been addressed by laboratory experiments. We concentrate on series of experiments, to see how experiments build on one another.
*Note:* Expected to be given in 2013–14. Open to undergraduates with permission of the instructor. Offered jointly with the Business School as 4160.

**Economics 2041. Field Experiments**
Catalog Number: 2427
*Nava Ashraf (Business School)*
Half course (spring term). Tu., 4:30–6. EXAM GROUP: 18
Students will design and run field experiments as a research methodology. Students will refine their own experimental designs and be able to run them by the end of the course, leading to an academic paper.
*Note:* Offered jointly with the Business School as 4430. Enrollment is limited to Doctoral students intending to run a field experiment in the near future.
Economics 2052. Game Theory I: Equilibrium Theory
Catalog Number: 3690
Drew Fudenberg
Half course (spring term). M., 4–7 p.m. EXAM GROUP: 9
Equilibrium analysis and its applications. Topics vary, but typically include equilibrium refinements (sequential equilibrium), the equilibria of various classes of games (repeated games, auctions, signaling games) and the definition and application of common knowledge.
Prerequisite: Economics 2010a or permission of the instructor.

Economics 2056a. Market Design and Electronic Marketplaces
Catalog Number: 3634
Peter Coles (Business School) and Benjamin Edelman (Business School)
Half course (fall term). F., 9–12. EXAM GROUP: 2, 3, 4
Explores the theory and practice of market design, with prominent examples drawn from auctions, labor markets, prediction markets and kidney exchange. In this year’s version of the course, we’ll emphasize online markets, including online advertising, Internet infrastructure, and collecting and analyzing data from the web. The prerequisite is Game Theory.
Note: Open to undergraduates with permission of the instructors. Offered jointly with the Business School as 4150.
Prerequisite: Game Theory.

[Economics 2056b. Topics in Market Design]
Catalog Number: 0402
Instructor to be determined
Studies topics in market design, focusing on auctions, auction-based marketplaces and platform markets. Covers methods and results from theory, empirical work, econometrics and experiments, highlighting practical issues in real-world design.
Note: Expected to be given in 2013–14.

[Economics 2057. Rationality and Choice]
Catalog Number: 3755 Enrollment: Limited to 25.
Amartya Sen
Half course (spring term). Hours to be arranged.
The course involves critical examination of alternative approaches to rationality, which is a central concept in economics, politics and the other social sciences, moral and political philosophy, and legal theory, including law and economics.
Note: Expected to be given in 2013–14.

[Economics 2058. Networks and Social Capital]
Catalog Number: 2872
Instructor to be determined
Half course (spring term). Hours to be arranged.
Provides a rigorous theoretical introduction into network models. Discusses the emerging empirical literature on economic and social networks. Topics include the role of networks in
technological progress, buyer-supplier networks, and social capital.  
*Note:* Expected to be given in 2013–14.

**[Economics 2059. Decision Theory]**
Catalog Number: 3825  
Tomasz Strzalecki  
*Half course (spring term). M., 2:30–5:30. EXAM GROUP: 7, 8, 9*  
The course focuses on classical models of choice in abstract settings, as well as uncertain and intertemporal environments. We will also study recent models that incorporate insights from psychology, such as temptation and self-control.  
*Note:* Expected to be given in 2013–14.

**Economics 2060. Contract Theory**
Catalog Number: 1404  
Philippe Aghion  
*Half course (fall term). M., W., 11:30–1. EXAM GROUP: 4, 5*  
Recent developments in contract theory. Includes hidden action and hidden information models, dynamic agency issues, incomplete contracts, and applications of contract theory to theories of the firm and corporate financial structure.

**Economics 2065. Designing Allocation Rules - (New Course)**
Catalog Number: 20876  
William L. Thomson  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
The goal is to identify, for each decision problem in a class of interest, the "most desirable" rules. Included are standard exchange economies, classical problems of fair division, public good production, cost allocation ("airport" problems, minimal cost spanning tree problems), rationing, bankruptcy, object allocation, priority-augmented object allocation ("school choice"), matching, one-to-one and several-to-one, time division, and cake division. The principles are punctual fairness principles, intra- and inter-personal (including lower and upper bounds on welfare, as well as requirements of robustness under permutations, or other operations, performed on assignments), and relational fairness principles, having to do with possible changes in the resources available, population, and preferences. The strategic branch of the literature will also be covered, criteria of robustness under misrepresentation of preferences or manipulation of resources being included.

**[*Economics 2070. Normative Economics]***
Catalog Number: 5647  
Jerry R. Green  
*Half course (fall term). Hours to be arranged.*  
This course offers a rigorous approach to normative economics. Voting, bargaining, cooperative game theory, social choice, mechanism design, equitable cost allocation, fair division, welfare analysis of taxation, and more. Students should have an interest and ability to work with abstract mathematics and axiomatic reasoning.  
*Note:* Expected to be given in 2013–14.
Catalog Number: 6576
*Benjamin M. Friedman and Richard Tuck*
*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*
Offers graduate students in relevant disciplines the chance to study the historical origins of central ideas in modern economics and to discuss their philosophical character.
*Note: Expected to be given in 2013–14.*
*Prerequisite: A basic knowledge of economics is assumed.*

**Economics 2082. Social Choice Theory - (New Course)**
Catalog Number: 50769 Enrollment: Limited to 20.
*Amartya Sen and Eric S. Maskin*
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*
A basic course in social choice theory and its analytical foundations. The subject matter will include possibility theorems in voting and in welfare economics. Attention will be paid to implementation theory, the theory of justice, and the analysis of liberties and rights.

**Economics 2085. Economics of Inequality and Poverty**
Catalog Number: 16767 Enrollment: Limited to 25.
*Amartya Sen*
*Half course (fall term). Hours to be arranged.*
A general course on the evaluation and axiomatic measurement of inequality and poverty, and on the analysis of contemporary economic problems in that light.
*Note: Expected to be given in 2013–14.*

**Economics 2087hfr (formerly *Economics 2087hf). Advanced Topics in Theory**
Catalog Number: 32489
*Drew Fudenberg*
*Half course (throughout the year). F., 3–5. EXAM GROUP: Fall: 8, 9*
The class will read and discuss current research in economics with a focus on game theory and decision theory. Students will be expected to make a verbal presentation.
*Note: Course will start in late October.*
*Prerequisite: Economics 2010a or permission of the instructor.*

**Economics 2091. History of Economic Thought I - (New Course)**
Catalog Number: 89713 Enrollment: Open to all graduate students in economics and to graduate students in related fields with the permission of the instructor.
*Jerry R. Green*
*Half course (fall term). W., 5:30–8:30 p.m. EXAM GROUP: 9*
Covers the history and philosophy of economic thought from the classics to the present. Some readings explore the relationship to other social sciences, to mathematics, biology, and physics. Others examine the way in which historical events have affected the evolution of economics.
*Note: Jointly offered with the Business School as 4811.*
Economics 2092. History of Economic Thought II - (New Course)
Catalog Number: 63648
Jerry R. Green
Half course (spring term). Hours to be arranged.
A continuation of Economics 2091.
Note: Offered jointly with the Business School as 4812.

Econometrics and Quantitative Methods

For Undergraduates and Graduates

Economics 1123. Introduction to Econometrics
Catalog Number: 0813
Rainer Winkelmann (fall term) and Jeffrey A. Miron (spring term)
Half course (fall term; repeated spring term). Fall: Tu., Th., 11:30-1; Spring: M., W., 12-1:30.
EXAM GROUP: Fall: 13, 14; Spring: 5, 6
An introduction to multiple regression techniques with focus on economic applications.
Discusses extensions to discrete response, panel data, and time series models, as well as issues such as omitted variables, missing data.
Note: Students may take either Economics 1123 or Statistics 139 for credit. Statistics 139 will not count as econometrics requirement. Also, Economics 1123 may not be taken for credit if taken after Economics 1126, but credit will be given for both courses if Economics 1123 is taken first. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or Core requirement for Quantitative Reasoning.
Prerequisite: Statistics 100.

Economics 1126. Quantitative Methods in Economics]
Catalog Number: 4076
Gary Chamberlain
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Topics include elements of statistical decision theory and related experimental evidence; some game theory and related experimental evidence; maximum likelihood; logit, normal, probit, and ordered probit regression models; panel data models with random effects
Note: Expected to be given in 2013–14. Economics 1123 may not be taken for credit if taken after Economics 1126, but credit will be given for both courses if Economics 1123 is taken first. This course, when taken for a letter grade, meets the Core requirement for Quantitative Reasoning.
Prerequisite: Statistics 100 or preferably 110; Mathematics 20.

Economics 1127. Statistical Methods for Evaluating Causal Effects
Catalog Number: 9967
Cassandra Pattanayak
Half course (spring term). Tu., Th., 11:30–1; . EXAM GROUP: 13, 14
Statistical methods discussed for inferring causal effects from data from randomized experiments or observational studies. Students will develop expertise to assess the credibility of causal claims and the ability to apply the relevant statistical methods for causal analyses. Examples will come
from many disciplines: economics, education, other social sciences, epidemiology, and biomedical science. Evaluations of job training programs, educational voucher schemes, changes in laws such as minimum wage laws, medical treatments, smoking, military service. 
*Prerequisite:* Statistics 100; Mathematics 21a,b or permission of instructor.

**Economics 1144. Advanced Applied Econometrics - (New Course)**
Catalog Number: 24563  
Ariel Pakes  
*Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4*
An introduction to the theory and application of recently developed econometric techniques used in advanced applied work. Simulation techniques, estimation subject to inequality restrictions, as well as semiparametric and nonparametric tools will be studied in a variety of empirical contexts.  
*Prerequisite:* Economics 1123

**Cross-listed Courses**

**Statistics 100. Introduction to Quantitative Methods for the Social Sciences and Humanities**  
**Statistics 104. Introduction to Quantitative Methods for Economics**  
**Statistics 110. Introduction to Probability**

**Primarily for Graduates**

**Economics 2110. Introductory Probability and Statistics for Economists**
Catalog Number: 7213  
Maximilian Kasy  
*Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4*
Introduction to probability and statistics. Emphasis on general methods applicable to both econometrics and economic theory. Topics include probability spaces, random variables, limit laws, estimation, hypothesis testing, and Bayesian methods.  
*Prerequisite:* Statistics (Stat 100), Linear Algebra and Calculus (Math 21a and 21b), and Real Analysis (Math 112).

**Economics 2120. Introduction to Applied Econometrics**
Catalog Number: 2352  
Stefan Hoderlein  
*Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*
Introduction to methods employed in applied econometrics, including linear regression, instrumental variables, panel data techniques, generalized method of moments, and maximum likelihood.  
*Note:* Enrollment limited to PhD candidates in economics, business economics, health policy, public policy, and political economy and government (PEG).  
*Prerequisite:* Economics 2110.

**Economics 2140. Econometric Methods**
Catalog Number: 7210  
*Alberto Abadie (Kennedy School)*
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Econometric methods for cross-section and panel data. Topics include generalized method of moments, empirical likelihood, instrumental variables, bootstrapping, clustering, treatment effects, selection bias, difference-in-differences, qualitative choice, quantile regression, nonparametric methods, and semiparametric methods.
Prerequisite: Economics 2120 or equivalent.

[Economics 2142. Time Series Analysis]
Catalog Number: 4414
James H. Stock
Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
A survey of modern time series econometrics. Topics include univariate models, vector autoregressions, linear and nonlinear filtering, frequency domain methods, unit roots, structural breaks, empirical process theory asymptotics, forecasting, and applications to macroeconomics and finance.
Note: Expected to be given in 2013–14.

[Economics 2144. Advanced Applied Econometrics]
Catalog Number: 7686
Ariel Pakes
Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4
An introduction to the theory and application of recently developed econometric techniques used in advanced applied work. Simulation techniques, estimation subject to inequality restrictions, as well as semiparametric and nonparametric tools will be studied in a variety of empirical contexts.

[Economics 2146. Topics in Financial Econometrics]
Catalog Number: 8715
Rustam Ibragimov
Half course (fall term). F., 4–7 p.m. EXAM GROUP: 9
A seminar course in financial econometrics. The topics covered include testing stylized facts in finance, robust inference, testing return predictability and market efficiency, inference in consumption-based asset pricing models and applications to real data.
Note: Expected to be given in 2013–14.
Prerequisite: Economics 2120 or equivalent.

[Economics 2149. Computational Economics]
Catalog Number: 7236
Che-lin Su
Half course (fall term). M., W., 10–11:30.
Graduate introduction to computational approaches for solving economic models. Formulate economic problems in computationally tractable form and use techniques from numerical analysis to solve them. Computational techniques in the current economics literature will be examined. Topics include solving dynamic optimization problems, computing equilibria of games and estimating structural models.
Note: Expected to be given in 2013–14.
Economics 2162. Research in Econometrics
Catalog Number: 2372
Maximilian Kasy 6990, Alberto Abadie (Kennedy School) 5277, Gary Chamberlain 1745 (on leave 2012-13), and Dale W. Jorgenson 2000 (on leave 2012-13)
Full course (indivisible). M., at 12:30. EXAM GROUP: Fall: 5, 6
Participants discuss recent research in econometrics and present their own work in progress. Open to doctoral students in economics.

Cross-listed Courses

Economic History; Development Economics

For Undergraduates and Graduates

[Economics 1310. The Economy of China]
Catalog Number: 66384
Richard N. Cooper
Half course (spring term). Hours to be arranged.
This course critically examines China’s remarkable economic performance in the post-Mao era and places this performance in historical and comparative context. Topics covered include China’s economic structure, institutions, inequality, trade, population, and public policy.
Note: Expected to be given in 2013–14. Writing requirement: A research paper is required. This course meets the concentration writing requirement.
Prerequisite: Economics 10

[Economics 1340. World Economic History]
Catalog Number: 4025 Enrollment: Limited to 80.
James Robinson
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
This course provides an overview of world economic history since the Neolithic revolution. It analyzes the main theories which have been proposed to explain these facts. Questions discussed are: why did the Neolithic revolution
Note: Expected to be given in 2013–14. Writing requirement: A research paper is required. This course meets the concentration writing requirement.
Prerequisite: Social Analysis 10 or Economics 10.

[Economics 1341. The Historical Origins of Middle Eastern Development]
Catalog Number: 9328
Eric Chaney
Half course (fall term). Hours to be arranged.
Middle Eastern countries enjoyed world economic leadership during the Middle Ages, and continue to play an important role in the world economy. This course will explore the historical development of Middle Eastern economies. Topics include the effects of colonialism, natural resource endowments and religion on economic growth. The course will emphasize how these and other historical factors continue to influence development prospects in the region today.
Note: Expected to be given in 2013–14. A research paper is required. This course meets the concentration writing requirement.
concentration writing requirement.  
**Prerequisite:** Social Analysis 10.

**[Economics 1356. Economics of Work and Family]**  
Catalog Number: 17685  
Claudia Goldin  
How are the most personal choices and life transitions decided? When and whom do you marry, how many children do you have, how much education should you obtain, and which careers or jobs will you pursue? Much will be explored in terms of change over time, particularly concerning the economic emergence of women and the growing role of government. Readings draw on economic theory, empirical analyses, history, and literature from the 19th century to the present.  
**Note:** Expected to be given in 2013–14. Writing requirement: A research paper is required. This course meets the concentration writing requirement. This course cannot be taken Pass/Fail. This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Social Analysis.  
**Prerequisite:** Economics 1010a1, 1010a2, or Economics 1011a or equivalent, and Economics 1123 or Economics 1126 or equivalent or permission of instructor.

**Economics 1357. Historical Perspectives on Economic Ascendancy**  
Catalog Number: 7554  
Richard A. Hornbeck  
Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4  
An introduction to economic history broadly construed, focusing on economic growth and development. Covers topics such as the industrial revolution, institutions and property rights, financial markets and regulation, the 1930s Great Depression, migration and labor markets, inequality, health, and environmental change. Emphasis on students learning to generate and implement ideas for new research.  
**Note:** Concentrators may not take pass/fail. Short research proposals are required, with an option to expand one into a longer paper that satisfies the concentration writing requirement.  
**Prerequisite:** Social Analysis 10 or permission of the instructor.

**[Economics 1370. Media, Democracy and Economics]**  
Catalog Number: 45985 Enrollment: Limited to 30.  
Philippe Aghion and Benedicte Berner  
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
This course will analyze the role of media in political and economic development. Topics covered are the history of the relationship between media and the state, media and democracy today, laws governing the media and its practice, legal and political pressures on the media, media as an economic object, ownership of media and its effects, media coverage on elections and in developing countries, competition and truth in the market for news, the current mainstream media, and journalistic ethics.  
**Note:** Expected to be given in 2013–14.  
**Prerequisite:** Social Analysis 10.
Economics 1389. Economics of Global Health
Catalog Number: 1900 Enrollment: Limited to 45.
Guenther Fink (Public Health)
This course examines health issues in developing countries from the standpoint of applied microeconomic research. Specific topics include: identifying the effect of health on growth and development and identifying the causal relationships between income, poverty, and health. We will also discuss health care delivery and human resource issues, the challenges of healthcare financing and health insurance, and the tension between equity and efficiency in the allocation of health resources.
Note: Offered jointly with the Kennedy School as SUP-518.
Prerequisite: Economics 1010a1, 1010a2, (or 1011a) and 1123 (or 1126).

Economics 1393. Poverty and Development
Catalog Number: 6516
Nathan J. Nunn
Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4
Studies the relationship between economic growth, poverty, and income distribution. Discusses how globalization affects poverty and inequality. Studies the main theories of economic growth and the main potential sources of economic development, from physical capital accumulation, to education, to technology, to the role of government. Discusses various global issues such as public global health (e.g. the impact of malaria and AIDS on Africa), corruption and institutions, natural resources, the environment, international donor institutions, and population growth.
Note: Writing requirement: A research paper is required. This course meets the concentration writing requirement.
Prerequisite: Economics 1010a1, 1010a2, (or 1011a) and 1010b (or 1011b). It is recommended that students have taken Economics 1123 or equivalent.

Cross-listed Courses

Government 1197. The Political Economy of Africa
[*History 2331. Adam Smith: Philosophy and Political Economy: Seminar]

Primarily for Graduates

Economics 2325. Comparative Historical Economic Development
Catalog Number: 8510
Nathan J. Nunn and James Robinson
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
The course examines the historical origins of differences in the economic and social development of societies. Participants discuss recent research in the field and present their own work in progress.
Note: This course fulfills the distribution requirement. Undergraduates may take this course with permission of the instructor.
**Economics 2327. Economic Development: Theory, Policy, and Evidence**  
Catalog Number: 8092  
Dani Rodrik (Kennedy School) and Rema N. Hanna (Kennedy School)  
Half course (fall term). M., W., 11:40-1, and a weekly section, F., 1-2:30. EXAM GROUP: 4, 5  
Provides a graduate-level overview of the theory of and evidence on economic development from a policy-oriented perspective. Aim is to allow students to analyze policy debates surrounding development from a broad and rigorous analytical base.  
*Note:* Offered jointly with the Kennedy School as PED-101.

**[Economics 2328. The Emergence of Modern Economic Growth: A Comparative and Historical Analysis]**  
Catalog Number: 9475  
James Robinson  
Half course (fall term). Hours to be arranged.  
Overview and analysis of comparative economic development during the last half millennia. Examines the emergence of modern economic growth in Europe after 1500, and the forces that led to the great divergence in prosperity in the 19th century. Also considered: colonialism, communism, fascism, and revolution.  
*Note:* Expected to be given in 2013–14.

**Economics 2330. History and Human Capital**  
Catalog Number: 2588  
Claudia Goldin and Lawrence F. Katz  
Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4  
Explores a range of subjects concerning human capital, historically and comparatively. Topics include fertility, mortality, health, immigration, women’s work, child labor, retirement, education, inequality, slavery, unionization, and governmental regulation of labor, all within the broader context of economic history.  
*Note:* Satisfies the graduate distribution requirement. Open to undergraduates on a limited basis with permission of instructor.

**[Economics 2333. Historical Perspectives on Current Economic Issues]**  
Catalog Number: 6800  
Richard A. Hornbeck  
Half course (spring term). Hours to be arranged.  
Comparative economic history emphasizing sources of economic growth and development. Topics include technological change and industrialization, institutions, the Great Depression and financial regulation, migration and adjustment to economic shocks, public infrastructure, labor markets and wage inequality, and health. Each topic is motivated by a current concern and develops methods for historical analysis to inform modern economic questions.  
*Note:* Expected to be given in 2013–14. Satisfies the graduate distribution requirement. Open to undergraduates on a limited basis with permission of instructor.

**Economics 2339. Research in Economic History**  
Catalog Number: 8183  
Claudia Goldin, Richard A. Hornbeck, Nathan J. Nunn and James Robinson
Full course (indivisible). M., 4–5:30. EXAM GROUP: Fall: 9
Participants discuss recent research in economic history and present their own work in progress.
Note: Primarily, but not exclusively, for doctoral students in economics who have passed their oral examinations. Popularly known as The History Tea.

[Economics 2350. Workshop in Religion, Political Economy, and Society]
Catalog Number: 0815
Rachel M. McCleary, Robert J. Barro, and Edward L. Glaeser
Half course (spring term). Th., 1–2:30.
Topics on the interplay between religion and the social sciences.
Note: Expected to be given in 2013–14.

Economics 2390b. Development Economics I: Microeconomic Issues
Catalog Number: 2990
Michael R. Kremer and Sendhil Mullainathan
Half course (fall term). M., W., 3–4:30. EXAM GROUP: 8, 9
Topics include agricultural issues such as peasant behavior, land tenancy, interlinked markets; credit and insurance market problems and institutions; health, nutrition, and productivity; gender bias; education; and technology adoption.

Economics 2390c. Development Economics II: Macroeconomic Issues
Catalog Number: 0388
Michael R. Kremer and Nathan J. Nunn
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
The first part will cover macro-economic topics including aggregative and non-aggregative growth models, growth and development accounting and models of technology diffusion and choice. The second part will evaluate the role of governance/institutional design in affecting development.
Note: Offered jointly with the Kennedy School of Government as PED-319.

*Economics 2390dhf. Research in Economic Development
Catalog Number: 1926
Sendhil Mullainathan 5139, Philippe Aghion 1263, Richard A. Hornbeck 6423, Asim I. Khwaja (Kennedy School) 3994, and Michael R. Kremer 2112
Half course (throughout the year). Th., 12–1:30. EXAM GROUP: 14, 15
Participants discuss recent research in development economics and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.
Note: Popularly known as the Development Lunch.

[Economics 2393. The Design of Development Policy: From Research to Practice]
Catalog Number: 62879
Sendhil Mullainathan and Rohini Pande (Kennedy School)
Half course (spring term). Hours to be arranged.
Development research is fascinating in part because it has a direct impact on public policy. Yet the pathways to impact are very different, from shaping how we evaluate public and non-profit programs to setting countrywide goals. This course will take a micro-economic perspective and
critically review the distinct ways in which research affects and is affected by public policy. General topics will include: the debate over randomized evaluations, the creation and diffusion of policy innovations, the tension between micro and macro policy approaches and the role of theory. Specific areas covered will include Finance, Education and Public health and Governance.

Note: Expected to be given in 2013–14. The course will presume knowledge of an advanced statistics course. Open to undergraduates with permission of the instructor. Jointly listed with the Kennedy School as PED-330.

**Monetary and Fiscal Theory and Policy; Public Sector Economics**

*For Undergraduates and Graduates*

**Economics 1410. Public Economics: Designing Government Policy**
Catalog Number: 6136
*Martin Feldstein and Raj Chetty*
Half course (spring term). M., W., (F.), 2:00-3:30, and a weekly section to be arranged. EXAM GROUP: 7, 8

This course analyzes what role the government should play in a market economy. It covers topics such as tax and welfare policy, unemployment insurance, environmental protection, education policy, social security.

Note: Students should have some knowledge of basic calculus and statistics, but there is no formal mathematics prerequisite. Offered jointly with the Kennedy School as SUP-125. This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.

Prerequisite: Economics 1010a1, 1010a2, or 1011a or permission of instructor.

**Economics 1415. Analytic Frameworks for Policy**
Catalog Number: 93229
*Richard J. Zeckhauser (Kennedy School)*
Half course (fall term). Tu., Th., 1:10–2:30; Review Sessions F., 1:10-2:30. EXAM GROUP: 15, 16

This course develops abilities in using analytic frameworks in the formulation and assessment of public policies. It considers a variety of analytic techniques, particularly those directed toward uncertainty and interactive decision problems. It emphasizes the application of techniques to policy analysis, not formal derivations. Students encounter case studies, methodological readings, modeling of current events, the computer, a final exam, and challenging problem sets.

Note: Jointly offered by HKS as API-302.

Prerequisite: Economics 1011a or permission of instructor.

**Economics 1420. American Economic Policy**
Catalog Number: 8110
*Martin Feldstein, Jeffrey B. Liebman (Kennedy School), and Lawrence H. Summers*
Half course (spring term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3

Analyzes major issues in American economic policy including taxation, Social Security, health
care reform, budget policy, monetary and fiscal policy, and exchange rate management. Current economic issues and policy options discussed.

*Note:* Offered jointly with the Kennedy School as API-126. This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.

*Prerequisite:* Economics 1010a1, 1010a2, or 1011a, or permission of instructor.

[Economics 1425. Political Economics]

Catalog Number: 68084
Enrollment: Limited to 20.

*Andrei Shleifer*

**Half course (spring term).** Th., 2:30–4:30. **EXAM GROUP:** 16, 17, 18

Discusses several research areas in political economy, including the origins of the state, comparative political systems, theories of economic reform, fiscal problems in democracies, rule of law, privatization, and regulation.

*Note:* Expected to be given in 2013–14. A research paper is required. This course meets the concentration writing requirement.

*Prerequisite:* Economics 1010a1, 1010a2, or 1011a.

[Economics 1430. Macroeconomics and Politics]

Catalog Number: 5549

*Robert J. Barro*

**Half course (spring term).** Tu., Th., 2:30–4. **EXAM GROUP:** 16, 17

Topics include the political economy of economic growth, including the roles of democracy and legal institutions; inflation, monetary policy, and fiscal policy; interplay between religion and political economy; and analyses of economic and monetary unions.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Economics 1010b or 1011b, or permission of the instructor.

[Economics 1432. Economics of European Integrations]

Catalog Number: 29276
Enrollment: Limited to 40.

*Hans-helmut Kotz*

**Half course (fall term).** Tu., Th., 10–11:30; **EXAM GROUP:** 12, 13

The aim of the course is to give students familiarity with a broad range of European policy issues: integration of markets (for goods, services, and labor), monetary union (ECB) and its consequences for fiscal policy, financial sector regulation as well as supervision. It is offered for students who would like to employ the tools they have learned in principles of economics and introductory micro and macro courses on real world cases. This implies to write and present a paper (mandatory writing requirement).

*Note:* Writing requirement: A research paper is required. This course meets the concentration writing requirement.

[Economics 1435. Macroeconomic Policy in the Global Economy]

Catalog Number: 73396

*Emmanuel Farhi*

**Half course (spring term).** Tu., Th., 1 to 2:30; section TBA. **EXAM GROUP:** 15, 16

Examines fiscal policy, monetary policy, exchange rate policy, and financial regulation. Emphasizes both short-term stabilization goals and longer-term policy objectives. Considerable
attention to recent policy.

**Prerequisite:** Students taking this course should have taken an intermediate macroeconomics class (1010b or 1011b). Knowledge of univariate calculus and basic statistics will be assumed.

**Economics 1450r. Religion and Political Economy**

Catalog Number: 43748

Robert J. Barro

Half course (fall term). W., 2–4:30. EXAM GROUP: 7, 8, 9

Recent research on religion has stressed social-science approaches. Parts of the work assess effects of economic and other forces on religious participation and beliefs. This topic includes models of secularization and of competition among alternative forms of religion, including analyses of the Reformation. Religious conversion and the club model of religious participation will be considered. Other aspects of the research analyze effects of religiosity on microeconomic variables, including work effort, thrift, education, health, and violence. Parts consider the impact of religion on macroeconomic outcomes, including economic growth. Additional work considers the interplay between religion and political institutions, including the role of state religion and interactions with Communism and democracy.

**Note:** Expected to be given in 2013–14. Satisfies writing requirement.

**Prerequisite:** Intermediate Macroeconomics and Microeconomics: Economics 1010a1, 1010a2, or 1011a and Economics 1010b or 1011b.

**Economics 1460. Economics of Health Care Policy**

Catalog Number: 4540

Joseph P. Newhouse (Kennedy School, Medical School, Public Health)

Half course (spring term). M., W., 8:30–10. EXAM GROUP: 1, 2

Policy issues related to the following: the demand for medical care services, especially as a function of insurance; the demand for insurance and issues of selection; reimbursement policies of Medicare and other payers toward health plans, hospitals, and physicians; effects of health maintenance organizations and managed care; and malpractice and tort reform. Focus on federal policy, although state and local perspectives will receive some attention.

**Note:** Students may not take both Economics 1460 and Quantitative Reasoning 24: Health Economics and Policy for credit. Offered jointly with the Kennedy School as SUP-572. This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.

**Prerequisite:** Economics 1010a or 1011a. A statistics course is highly desirable.

**Economics 1490. Growth and Crisis in the World Economy**

Catalog Number: 35497 Enrollment: Limited to 30.

Dale W. Jorgenson

Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

This course assesses the future of the tri-polar world economy - Asia, Europe, and North America. The course analyzes the resurgence of the US economic growth, the emergence of asset pricing bubbles, and the ensuing financial and economic crisis. We will discuss the sources of Asian growth miracles and the convergence and subsequent divergence of Europe and North America. What growth rate is sustainable and who will lead? What are the forces that threaten long-term prosperity?
Note: Expected to be given in 2013–14. This course satisfies the Economics concentration writing requirement. Students who would like to enroll should submit the application form available on the course website.

Prerequisite: Economics 1010a1, 1010a2, or 1011a and Economics 1010b or 1011b.

Cross-listed Courses


Primarily for Graduates

[Economics 2410a. Topics in Macroeconomics]
Catalog Number: 7072
Instructor to be determined
Half course (fall term). Hours to be arranged.
Investigates the effect of financial market imperfections on aggregate investment and asset prices. Topics include financial persistence and amplification mechanisms, fire sales and limits to arbitrage, leverage cycles, asset price bubbles, financial fragility and financial contagion.
Note: Expected to be given in 2013–14.

Economics 2410hfc. Advanced Topics in Macroeconomics
Catalog Number: 1746
Jonathan Parker (fall) and Chris Edmond (spring)
Half course (throughout the year). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
The first half of the course (Parker) covers theoretical and empirical work on microeconomic behavior and macroeconomics, with particular focus on aggregate consumption, financial markets, and government policy. The second half (Edmond) will cover quantitative models of producer heterogeneity with applications to industry dynamics, innovation, development accounting, aggregate fluctuations, and the gains from international trade. The course will meet beginning on October 23.

[Economics 2412a. Political Economics]
Catalog Number: 47596
Alberto F. Alesina
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Discusses several research areas in political economy, including the origins of the state, comparative political systems, theories of economic reform, fiscal problems in democracies, rule of law, privatization, regulation, and elections and the economy.
Note: Expected to be given in 2013–14.

[Economics 2412b. Law, Economics, and Politics]
Catalog Number: 62703
Andrei Shleifer and Elias Papaioannou
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
The course will discuss a range of topics covering political economy and law and economics.
The topics will include: determinants of economic growth, social capital, legal systems and traditions, regulation, courts, public and private ownership, and economic transition.

*Note: Expected to be given in 2013–14.*

**Economics 2412c. Introduction to Formal Political Economy**
Catalog Number: 59539
*Instructor to be determined*

*Half course (spring term). Hours to be arranged.*

This class tries to familiarize students with the basics in formal political economy, and give a sense of the research frontier. Topics include models of collective choice, information aggregation in elections, legislative decision-making, and lobbying.

*Note: Expected to be given in 2013–14.*

**Economics 2420hf. Research in Macroeconomics**
Catalog Number: 5946

*Philippe Aghion 1263, Alberto F. Alesina 2074 (on leave 2012-13), Robert J. Barro 1612 (on leave 2012-13), Emmanuel Farhi 5715, Benjamin M. Friedman 3787 (on leave fall term), David I. Laibson 1241, and N. Gregory Mankiw 1118*

*Half course (throughout the year). Tu., 11:30–1.*

Participants discuss recent research in macroeconomics and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.

*Note: Popularly known as the Macro Lunch.*

**Economics 2421. Reading Course in Monetary and Fiscal Policy**
Catalog Number: 97507

*Benjamin M. Friedman and Christian Paul Edmond*

*Half course (spring term). W., 2:30–4. EXAM GROUP: 7, 8*

A reading course that allows students to discuss and evaluate recent research in the analysis of monetary and fiscal policies. Students will be expected to participate in formally presenting, and critiquing, unpublished or newly published papers.

*Note: Students taking the course for credit will also be expected to undertake research papers of their own.*

**Economics 2450a. Public Economics and Fiscal Policy I**
Catalog Number: 1339

*Raj Chetty*

*Half course (fall term). M., W., (F.), 11:30–1. EXAM GROUP: 4, 5*

This course covers basic issues in the optimal design of tax and social insurance policies, with emphasis on combining theoretical models with empirical evidence. Topics include efficiency costs and incidence of taxation, income taxation, transfer and welfare programs, public goods and externalities, optimal social insurance, and welfare analysis in behavioral models.

*Prerequisite:* Economics 2010a and 2010b or Economics 2020a and 2020b.

**Economics 2450b. Public Economics and Fiscal Policy II**
Catalog Number: 6478

*Martin Feldstein, Emmanuel Farhi, and Edward L. Glaeser*
Half course (spring term). M., W., (F.), 11:30–1. EXAM GROUP: 4, 5
This course covers theoretical and empirical applications of public economics to policy debates. Topics include education, local public finance, fiscal federalism, housing policy, corporate and international taxation, social security, and macroeconomic stabilization using fiscal policy.
Prerequisite: Economics 2010a and 2010b or Economics 2020a and 2020b. Students are strongly encouraged to take Economics 2450a before taking 2450b.

**Economics 2460. Health Economics Workshop**
Catalog Number: 7617
Joseph P. Newhouse (Kennedy School, Medical School, Public Health), Amitabh Chandra (Kennedy School), and David M. Cutler
Half course (spring term). W., 4–6. EXAM GROUP: 9
Focuses on theory, econometric models, and public policy of health care. Frontier work in health economics presented and discussed by instructors and outside speakers.
Note: May be taken for credit only by dissertation students writing a research paper. Offered jointly with the Kennedy School as SUP-951.

[Economics 2465. Health Economics]
Catalog Number: 83396
David M. Cutler
Half course (spring term). Tu., Th., (F.), 2:30–4. EXAM GROUP: 7, 8, 16, 17
This course surveys topics in health economics. It touches on public sector issues, the industrial organization of health care markets, interactions between health and labor markets, and health in developing countries. Theory and empirical work are presented.
Note: Expected to be given in 2013–14.

Catalog Number: 6834
Raj Chetty 6276, David M. Cutler 2954 (on leave 2012-13), and Martin Feldstein 1509
Full course. Tu., 1–2:30. EXAM GROUP: 15, 16
Participants discuss recent research in public economics and fiscal policy and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.

*Economics 2490. The Economics of National Security Seminar*
Catalog Number: 9061
Martin Feldstein
Half course (spring term). Tu., 6–9 p.m. EXAM GROUP: 18
Considers a range of issues relating to national security, including bioterrorism, the market for nuclear weapons, the defense industry, the dependence on imported oil, intelligence, sanctions, etc.
Note: Speakers will be both experts with experience in this field and economists doing research on these issues. Seminar participants will be economics department faculty and selected graduate students.

**International Economics**
For Undergraduates and Graduates

[Economics 1530. International Monetary Economics]
Catalog Number: 2269
Richard N. Cooper
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
This is an intermediate level international finance and macroeconomics course that uses a mix of theoretical, empirical and policy frameworks to analyze topical problems in international finance. The topics include exchange rate determination, currency interventions, monetary policy coordination, capital flows and currency crises.
Note: Expected to be given in 2013–14. Writing requirement: A research paper is required. This course meets the concentration writing requirement. May not be taken for credit with Economics 1531.
Prerequisite: Economics 1010b or 1011b.

Economics 1531. Economics of International Financial Policy
Catalog Number: 7018
Gita Gopinath
Half course (spring term). Tu., Th., 1–2:30; F., at 11. EXAM GROUP: 15, 16
This is an intermediate level international finance and macroeconomics course that uses a mix of theoretical, empirical, and policy frameworks to analyze topical problems in international finance. The core objective of the course is to develop simple macroeconomic models of open economies that can be usefully applied to international economic phenomena. We will examine the balance of payments, the determination of exchange rates, the effect of fiscal and monetary policies under fixed and floating exchange rate regimes, balance of payment crisis, international macroeconomic dependence, financial globalization, and the challenges facing developing economies. Recent issues such as the crisis in the Euro area and the sustainability of the Euro, the global transmission of the financial crisis, global imbalances, China’s exchange rate policy, among others, will receive attention.
Note: Offered jointly with the Kennedy School as ITF-220. May not be taken for credit with Economics 1530 or 1435.
Prerequisite: Economics 1010b or 1011b. Students must be very comfortable with algebra and basic calculus.

Economics 1535. International Trade and Investment
Catalog Number: 2557
Pol Antràs
Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8
Analyzes the causes and consequences of international trade and investment. Focuses on the interplay of economic theory and empirical descriptions of foreign trade and direct investment patterns.
Prerequisite: Economics 1010a1, 1010a2, or 1011a.

[Economics 1540. Topics in International Trade]
Catalog Number: 7470
Pol Antràs
Half course (spring term). Hours to be arranged.
Covers advanced topics in international economics with a special emphasis on an analytical approach to the recent process of globalization. Topics include the role of multinational firms in the global economy, the effect of international outsourcing on wages, and trade and industrial development.

Note: Expected to be given in 2013–14. This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement.
Prerequisite: Economics 1535 and basic knowledge of calculus and econometrics.

[Economics 1542. International Trade Policy]
Catalog Number: 2613
Elhanan Helpman

Half course (fall term). Hours to be arranged.
Provides a discussion of the economic impacts of international trade policies and the political economy of trade policy formation. The course will focus on analytical methods and therefore requires knowledge of calculus.

Note: Expected to be given in 2013–14.
Prerequisite: Economics 1010a1, 1010a2, or 1011a, or permission of instructor.

Economics 1545. International Financial and Macroeconomic Policy
Catalog Number: 5166
Kenneth Rogoff

Half course (fall term). M., W., 1–2:30; EXAM GROUP: 6, 7
Advanced theoretical and empirical analysis of contemporary international macroeconomic policy issues in both industrialized and developing economies. Topics include exchange rates, international capital flows, debt crises, growth, and policy coordination.

Prerequisite: Economics 1010b or 1011b.

Primarily for Graduates

Economics 2530a. International Trade
Catalog Number: 4537
Elhanan Helpman

Half course (fall term). M., W., 8:30–10. EXAM GROUP: 1, 2
Provides a broad overview of theory and evidence concerning international trade, direct foreign investment, and trade policy.

Note: Strongly recommended as preparation for Economics 2530b. Open to undergraduates only with permission of instructor.
Prerequisite: Economics 2010a and 2010b.

Economics 2530b. International Finance
Catalog Number: 7144
Gita Gopinath

Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Financial aspects of growth and income determination in open economies. Topics include international business cycle, monetary and exchange rate regimes, capital flows, and current
issues in international macroeconomic policy.  
Prerequisite: Economics 2010c and 2010d.

**Economics 2535. Advanced Topics in International Trade**
Catalog Number: 6410  
Marc J. Melitz  
*Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4*  
Covers advanced theoretical and empirical topics concerning the determinants of world trade patterns.  
Prerequisite: Economics 2530a or permission of instructor.

*Economics 2540hf. Research in International Economics*
Catalog Number: 4008  
Kenneth Rogoff 1746 and members of the Department  
*Half course (throughout the year). W., at 12. EXAM GROUP: Fall: 5*  
Participants discuss recent research in international economics and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.  
Note: Popularly known as the International Lunch.

**Industrial Organization and Regulation; Environmental Economics**

**For Undergraduates and Graduates**

*Economics 1620. Industry Structure, Strategy, and Public Policy - (New Course)*
Catalog Number: 90055  
F. M. Scherer (Kennedy School)  
*Half course (spring term). M., W., 1:10–2:30. EXAM GROUP: 6, 7*  
Provides a systematic economic and historical framework for evaluating industrial policies such as agricultural crop price supports, international dumping and subsidy rules, energy policy, technology policy, competition policy (antitrust), public regulation, and corporate bailouts. It proceeds through a series of 10 industry case studies, in order: agriculture, crude petroleum, petroleum refining, steel, integrated circuits, computers, the Internet, automobiles, pharmaceuticals (domestic and international), and beer. Grading will be on the basis of two short policy papers and a final examination. A longer industry study can be substituted for the final exam.  
Note: Jointly offered with the Kennedy School as BGP-201.

[Economics 1640. Industrial Organization: Theory and Applications]  
Catalog Number: 7875 Enrollment: Limited to 30.  
Instructor to be determined  
*Half course (spring term). Hours to be arranged.*  
Theoretical and empirical analysis of contemporary topics in industrial organization. Uses economic theory to analyze important issues facing firms, and examines the practical challenges of empirical applications of theory.  
Note: Expected to be given in 2013–14. Students may not take both Economics 1640 and
Economics 1641 for credit.  
Prerequisite: Economics 1010a1, 1010a2, or 1011a.

**Economics 1642. Advanced Industrial Organization**  
Catalog Number: 9613  
Gregory M. Lewis  
Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4  
Theory and modern empirical techniques in industrial organization. Topics may include static analysis and estimation of market equilibrium; dynamic models of entry and investment; price discrimination, collusion, mergers and vertical control, with applications to antitrust policy; and issues in auctions and market design.  
Note: Optional writing Requirement: This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement. This is a hands-on course, and students will be expected to use Stata or other statistical software to perform data analysis.  
Prerequisite: Economics 1010a1, 1010a2, or 1011a; Economics 1123 or 1126.

**Economics 1661. Fundamentals of Environmental Economics and Policy**  
Catalog Number: 2115 Enrollment: Limited to 90.  
Robert N. Stavins (Kennedy School)  
Half course (spring term). M., W., 1-2:30 and an optional review section F., 1-2:30. EXAM GROUP: 6, 7  
Provides a survey, from the perspective of economics, of environmental and natural resource policy. Combines lectures on conceptual and methodological topics with examinations of public policy issues.  
Note: Optional writing Requirement: This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement. Offered jointly with the Kennedy School as API-135. Expected to be bracketed in 2013-14. Due to space restrictions, the course will be capped at 90 students. In cases of over-subscription, the following prioritization will be used: 1. Harvard Kennedy School Students; 2. Junior Concentrators at Harvard College, for whom this meets a necessary concentration requirement; 3. Sophomore Concentrators at Harvard College, for whom this meets a necessary concentration requirement; 4. Other Harvard College Students; 5. Other Harvard University Students; 6. Students from other universities (e.g., MIT, Tufts); and, 7. Auditors. In the event that the course is over-subscribed, students will not be able to add the course. For those interested in similar other courses, we encourage them to also consider Econ-1687, Advanced Economics of the Environment, Natural Resources, and Climate Change (Prof. Weitzman).  
Prerequisite: Economics 10 or permission of instructor.

**Economics 1687. Advanced Economics of the Environment, Natural Resources, and Climate Change**  
Catalog Number: 44432  
Martin L. Weitzman  
Half course (spring term). M., W., 1-2:30; and a weekly recitation F., 1-2:30. EXAM GROUP: 6, 7  
Survey of foundations and applications of the modern theory of environmental and natural-resource economics. What are the basic models and what are they suggesting about policy?
Externalities, public goods, common property, strategies for controlling pollution. Dynamics of renewable resources (fisheries, forestry) and dynamics of non-renewable resources (minerals like oil). Discounting, uncertainty, cost-benefit analysis, investment criteria for environmental projects, green accounting, sustainability. Basic economic analysis of climate change as prototype example.

*Note:* Students from other concentrations are welcome to take this course for credit.

*Prerequisite:* Economics 1010a1 or 1010a2.

**Primarily for Graduates**

**Economics 2610. Industrial Organization I**
Catalog Number: 3766
Ariel Pakes

*Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7*


**Economics 2611. Industrial Organization II**
Catalog Number: 2302
Gregory M. Lewis

*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7*

Application of industrial organization to problems of public policy. Applied analysis of antitrust policy, network industries, vertical relationships, auctions, and other topics depending on interest.

*Note:* Students are urged to take Economics 2610 before Economics 2611.

**Economics 2640hf. Research in Industrial Economics**
Catalog Number: 5981
Ariel Pakes 1774, Susan Athey 5334 (on leave fall term), and Gregory M. Lewis 5868

*Half course (throughout the year). Tu., 11:30–1. EXAM GROUP: 13, 14*

Participants present their own research in progress in an informal setting. Open to doctoral students in economics who have passed their general examinations and are in the early stages of their dissertations.

**Economics 2665. The Economics of Organizations Workshop**
Catalog Number: 9819
Oliver S. Hart

*Half course (fall term; repeated spring term). Hours to be arranged.*

Speakers present current research in the field in a seminar setting.

*Note:* Expected to be given in 2013–14. Offered jointly with the Business School as 4230.

**Economics 2670. Organizational Economics**
Catalog Number: 6913
Instructor to be determined
Half course (spring term). Hours to be arranged. Theoretical and empirical work on organizations. Topics include agency problems inside organizations, boundaries of the firm, relational contracting, authority, hierarchies, delegation, decentralization, and nonstandard organizational arrangements (including joint ventures, venture capital, and public ownership).

Note: Expected to be given in 2013–14. Offered jointly with the Business School as 4180.
Prerequisite: Economics 2020.

**Economics 2680. Environmental and Natural Resource Economics**
Catalog Number: 6529
Martin L. Weitzman

Half course (fall term). M., W., 1–2:30.
Basic theory and models. Externalities, common property, public goods, pollution control, renewable and non-renewable resources, discounting, uncertainty, cost-benefit analysis, green accounting, sustainability, climate change.

Note: Students welcome from other departments and programs. There is a choice of a research paper or final exam.
Prerequisite: Graduate price theory at level of Economics 2010 or 2020.

**Economics 2690hf. Environmental Economics and Policy Seminar**
Catalog Number: 4324
Robert N. Stavins (Kennedy School) and Martin L. Weitzman

Half course (throughout the year). W., 4–5:30. EXAM GROUP: 9
Selected topics in environmental and resource economics. Emphasizes theoretical models, quantitative empirical analysis, and public policy applications. Includes invited outside speakers.

Note: Primarily for graduate students in economics or related fields with environmental interests. Offered jointly with the Kennedy School as API-905Y.

Prerequisite: Graduate-level course in microeconomic theory.

**Financial Economics**

**For Undergraduates and Graduates**

**Economics 1723. Capital Markets**
Catalog Number: 1917
Alp Simsek

Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13
An introduction to the economic analysis of investment decisions and financial markets. Concepts include time discounting, market efficiency, risk, and arbitrage. These concepts are applied to fixed-income securities, equities, and derivative securities.
Prerequisite: Statistics 100 and Economics 1010a1, 1010a2, or 1011a.

**Economics 1745. Corporate Finance**
Catalog Number: 5889
Owen A. Lamont
Half course (spring term). Tu., Th., 1-2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16
Introduction to corporate finance, including capital budgeting, capital structure of firms, dividend policy, corporate governance, and takeovers.
Prerequisite: Economics 1010a1, 1010a2, or 1011a, Mathematics 20, and Statistics 100.

**Economics 1760. Topics in Finance**
Catalog Number: 77458
Adriano Rampini
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Selected topics in financial economics, including debt, default, financial intermediation, liquidity, capital reallocation, collateral, and risk management. Emphasis on theory. May include discussion of empirical evidence and implications for macroeconomic outcomes and financial development.
Prerequisite: Economics 1010a1, 1010a2, or 1011a; Mathematics 18, 20, 21a, or similar preparation; and Statistics 100, 104, or 110.

*Primarily For Graduates*

**Economics 2723. Asset Pricing I**
Catalog Number: 2847
Owen A. Lamont
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An introduction to financial economics emphasizing discrete-time models and empirical applications. Reviews basic asset pricing theory. Discusses empirical topics including predictability of stock and bond returns, the equity premium puzzle, and intertemporal equilibrium models.
Note: Offered jointly with the Business School as 4209.
Prerequisite: Economics 2010a or 2020a, or permission of instructor.

**Economics 2725. Corporate Finance**
Catalog Number: 1427
David S. Scharfstein (Business School) and Robin Marc Greenwood (Business School)
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Theory and empirical evidence on capital structure, dividends, investment policy, and managerial incentives. Topics include banking, corporate governance, and mergers.
Note: Offered jointly with the Business School as 4223.
Prerequisite: Economics 2060.

[Economics 2726. Theoretical and Empirical Perspective on Entrepreneurship: Economics and Finance ]
Catalog Number: 4451
Joshua Lerner (Business School) and William Robert Kerr (Business School)
Half course (spring term). Hours to be arranged.
Entrepreneurship is a complex phenomenon that has attracted little academic attention. This course explores the emerging work in this area. Students taking the course for credit will be
expected to complete two referee reports and a paper. 
Note: Expected to be given in 2013–14. Offered jointly with the Business School as 4350.

**Economics 2727. Empirical Methods in Corporate Finance**
Catalog Number: 9055
Paul Gompers (Business School), Samuel Gregory Hanson (Business School), Victoria Ivashina (Business School), and Aditya Vikram Sunderam (Business School)
Half course (spring term). Th., 2:30–5:30. EXAM GROUP: 16, 17, 18
Examines empirical research in corporate finance. Covers empirical research methodology, financial institutions, and financial policy. Major emphasis is on how to do well-executed and persuasive research in corporate finance.
Note: Structured to minimize overlap with Economics 2725. Seminar format; students write referee reports and a research paper. Offered jointly with the Business School as 4220.

**Economics 2728. Behavioral Finance**
Catalog Number: 8633
Jeremy C. Stein
Half course (spring term). Hours to be arranged.
Deals with theoretical and empirical approaches to the study of financial markets using psychological or behavioral ideas. Topics include limited arbitrage, predictability of security returns, and trading volume.
Note: Expected to be given in 2013–14.

**Economics 2770hf. Research in Financial Economics**
Catalog Number: 1379
John Y. Campbell 1230 (on leave 2012-13) and Jeremy C. Stein 3752 (on leave 2012-13)
Half course (throughout the year). F., 12–1:30.
Participants discuss recent research in financial economics and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.
Note: Offered jointly with the Business School as 4601.

**Cross-Listed Courses**

**Labor, Human Resources, and Income Distribution; Urban Economics**

**For Undergraduates and Graduates**

**Economics 1815. Social Problems of the American Economy**
Catalog Number: 3130
Lawrence F. Katz
Half course (spring term). Hours to be arranged.
Examines selected social and economic problems of the US and evaluates market and governmental solutions. Topics include discrimination, income and wage inequality, welfare reform, antipoverty strategy (including education and training programs), homelessness, crime, and charitable behavior.
Note: Expected to be given in 2013–14. A research paper is required. This course meets the
concentration writing requirement.

Prerequisite: Social Analysis 10 or permission of the instructor.

[Economics 1816. Race in America]
Catalog Number: 2483 Enrollment: Limited to 40.
Roland G. Fryer
Half course (fall term). M., W., 1–2:30.
Examines the causes and consequences of racial inequality in America and evaluates the efficacy of various market and non-market solutions. Topics include: the racial achievement gap in education, the impact of crack cocaine on inner cities, racial differences in health, crime and punishment, labor market discrimination, social interactions and the effects of peer groups, affirmative action, and more.
Note: Expected to be given in 2013–14. Optional writing Requirement: This course offers an optional writing requirement which if completed will satisfy the concentration writing requirement. Offered in alternate years.
Prerequisite: Social Analysis 10.

Economics 1818. Economics of Discontinuous Change
Catalog Number: 3029
Richard B. Freeman
Half course (spring term). Tu., Th., 1–2:00, and a weekly section to be arranged.
Explores discontinuous changes in the economic position of groups and countries and presents mathematical and computer simulation models designed to illuminate these changes. Examples include growth/decline of trade unions, segregation of groups, development of linkages on the internet, changes in corporate work culture, growth of social pathologies in neighborhoods, and Malthusian concerns about the environment. Models include nonlinear simulations, neural networks, finite automata, evolutionary stable strategies, causal conjunctures, agent-based simulations, and genetic algorithms.
Note: Writing requirement: A research paper is required. This course meets the concentration writing requirement. Students should have some mathematical background, but there is no prerequisite.
Prerequisite: Social Analysis 10.

Economics 1820. Education Reform in America - (New Course)
Catalog Number: 52303
Roland G. Fryer
Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8
Introduces students to the methods and the research frontier in the economics of education. The first quarter of the course will cover common statistical methods in applied microeconomics, including instrumental variable models, regression discontinuities, difference-in-differences, and randomized inference. With these tools in hand, the course will critically survey the economics of education literature, placing particular emphasis on policies and practices designed to raise achievement among vulnerable populations. Topics will include achievement gaps, the role of incentives, the rise of charter schools, school turnaround efforts, and education’s role in determining economic outcomes.
Note: Writing requirement: A research paper is required. This course meets the concentration
writing requirement.  
Prerequisite: Courses in introductory statistics, econometrics, and/or microeconomics would be useful preparation, but there are no official prerequisites. A non-trivial amount of math fluency is expected, however.

**Primarily for Graduates**

**Economics 2810a. Labor Market Analysis**  
Catalog Number: 4862  
*Lawrence F. Katz*  
*Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4*  
Theoretical and empirical research on labor markets. Wage determination covers equalizing differences, human capital, job mobility, and incentive models. Labor supply covers life-cycle models. Labor demand includes minimum wage and union models.

**Economics 2810b. Labor Economics and Labor Market Institutions**  
Catalog Number: 3206  
*Amanda D. Pallais*  
*Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4*  
Examines the operation of the labor market and evaluation of labor market policies. Topics: labor econometrics, theories of wage determination, changes in the wage structure, unemployment, labor market institutions, and globalization and the labor market.

[Economics 2811. Social Economics]  
Catalog Number: 5188  
*Roland G. Fryer*  
*Half course (spring term). Tu., 5:30–8:30 p.m. EXAM GROUP: 18*  
Applies the tools of economics to explore social issues including crime, discrimination, racial and gender differences, poverty, family structure, urban problems, social interactions and peer effects, and intergenerational mobility.  
*Note:* Expected to be given in 2013–14.

**Economics 2812hf. Research in Labor Economics**  
Catalog Number: 0230  
*Lawrence F. Katz, Roland G. Fryer, Edward L. Glaeser, Claudia Goldin, and Amanda D. Pallais*  
*Half course (throughout the year). Tu., 1–2:30.*  
Participants discuss recent research in labor economics and present their own work in progress. Open to doctoral students in economics who have passed their oral examinations.

**Economics 2880. Economics of Science**  
Catalog Number: 7488  
*Richard B. Freeman*  
*Half course (spring term). Th., 2:30–5:30. EXAM GROUP: 16, 17, 18*  
Analyzes economic issues regarding the role of science and RD in the economy and in the deployment and productivity of scientists, engineers, and highly skilled technical workers.
Topics include: wage levels/employment prospects; stipend policy, education/recruitment, student unionization/post-doc organization, career choices/trajectories, with reference to women; scientific competition/collaboration.  

*Note:* Primarily for graduates but open to undergraduates with instructor’s permission. Undergraduates wishing to obtain concentration credit for this course should also attend 2888r.

**Economics 2888r (formerly Economics 2888hf). Economics of Science and Engineering Workshop**  
Catalog Number: 6311  
Richard B. Freeman  

*Half course (fall term; repeated spring term). F., 12–1:30. EXAM GROUP: 5, 6*  
Focus on work force and career issues. Topics include: Effects of globalization on work force and innovation, growth of networks in work; impact of career incentives on productivity; university policies; mobility between academe and industry; link between ideas and outputs.  

*Note:* Primarily for graduates. Undergraduates enrolled in 2880 should also attend 2888r, but can only receive one half-course concentration credit in total. Undergraduates enrolled in 2888r but not 2880 will not be granted concentration credit. Offered jointly with the Business School as 4245.

**Graduate Courses of Reading and Research**

*Economics 3000. Research Paper*  
Catalog Number: 4174  
Members of the Department  
Intended to fulfill the Research Paper Requirement for the PhD degree in Economics.  

*Note:* Ordinarily, this course is taken during the spring term of the second year of graduate study.

*Economics 3005. Reading and Research*  
Catalog Number: 3493  
Individual work or work in small groups (with a professor or lecturer in residence) in preparation
for the general examination for the PhD degree, or work on special topics not included in course offerings.

*Economics 3010. Direction of Doctoral Dissertations
Catalog Number: 4579
Members of the Department
Note: In all cases, the dissertation topic must have been formally submitted to, and approved by, a dissertation adviser.

*Economics 3011. The Behavioral and Experimental Economics Workshop
Catalog Number: 0109
Jerry R. Green 1539, David I. Laibson 1241, and Tomasz Strzalecki 6294 (on leave 2012-13)
Half course (fall term; repeated spring term). Tu., 2:30–4.
For students with an interest in economic theory. Faculty presentations by Harvard and MIT economists and invited guests. The location alternates between Harvard and MIT.
Prerequisite: Economics 2010a (or 2020a) and 2010b (or 2020b).

*Economics 3086. The Theory Workshop
Catalog Number: 53875
Susan Athey 5334 (on leave fall term), Drew Fudenberg 3460, Jerry R. Green 1539, and Tomasz Strzalecki 6294 (on leave 2012-13)
Half course (fall term; repeated spring term). Th., 4–6.
For students with an interest in economic theory. Faculty presentations by Harvard and MIT economists and invited guests. The location alternates between Harvard and MIT.

*Economics 3087. Applied Theory: Research Workshop
Catalog Number: 13964
Oliver S. Hart, Philippe Aghion, and Andrei Shleifer
Half course (fall term; repeated spring term). M., 5:30–7 p.m. EXAM GROUP: 9
Presentations of current research in the Applied Theory Field.

*Economics 3163hf. The Econometrics Workshop
Catalog Number: 4392
Gary Chamberlain 1745 (on leave 2012-13), Dale W. Jorgenson 2000 (on leave 2012-13), and Maximilian Kasy 6990
Half course (throughout the year). Th., 4:30–6.
Outside speakers and faculty present current research topics in theory and applications of econometrics.

*Economics 3336hfr. Economic History Workshop
Catalog Number: 0639
Claudia Goldin 2667, Eric Chaney 6129 (on leave 2012-13), and Nathan J. Nunn 5838
Half course (throughout the year). F., 2–3:30.
Intended for students writing dissertations related to economic history themes and/or methodology and for others with interests in economic history. Discusses research papers presented by scholars at Harvard and elsewhere.
**Economics 3390hf. Economic Development Workshop**  
Catalog Number: 2532  
Michael R. Kremer 2112, Shawn Cole (Business School) 1228, Richard A. Hornbeck 6423, Asim I. Khwaja (Kennedy School) 3994, and Sendhil Mullainathan 5139  
*Half course (throughout the year). Fall: Tu., 2:30–4; Spring: W., 2:30–4.*  
Fall speakers cover issues in growth and development. Spring speakers alternate between “growth and institutions,” focusing on the macro aspects of growth and development, and “labor and development,” focusing on the micro aspects.

**Economics 3410 (formerly Economics 2420). The Monetary and Fiscal Policy Seminar**  
Catalog Number: 2126  
Alberto F. Alesina 2074 (on leave 2012-13), Philippe Aghion 1263, Robert J. Barro 1612 (on leave 2012-13), Emmanuel Farhi 5715, Benjamin M. Friedman 3787 (on leave fall term), David I. Laibson 1241, and N. Gregory Mankiw 1118  
*Full course (indivisible). M., 2–4.*  
Seminar speakers present papers on macroeconomic topics, including issues relating to monetary and fiscal policies, economic growth, the role of institutions, and other research issues in the field.  
*Note:* Popularly referred to as the Macro Seminar.

**Economics 3450hf. The Public Economics and Fiscal Policy Seminar**  
Catalog Number: 3436  
David M. Cutler 2954 (on leave 2012-13), Raj Chetty 6276, Edward L. Glaeser 3219, and Lawrence F. Katz 1480  
*Half course (throughout the year). M., 4–6.*  
Invited speakers present theoretical and empirical research on a broad range of topics related to the design of government policy.

**Economics 3460c (formerly *Economics 3460chf). Research in Health Economics**  
Catalog Number: 5309  
Joseph P. Newhouse (Kennedy School, Medical School, Public Health) 2425  
*Half course (fall term).*  
Participants discuss recent research in health economics. Course may also include presentation of original research by participants. Open to doctoral students only.

**Economics 3530hf. The International Economics Workshop**  
Catalog Number: 5777  
Pol Antràs 4666, Richard N. Cooper 7211, Gita Gopinath 5042, Elhanan Helpman 2334 (on leave spring term), Marc J. Melitz 3499, and Kenneth Rogoff 1746  
*Half course (throughout the year). W., 4–6.*  
Outside speakers and faculty present research papers in all aspects of international economics, including theory, econometrics, and policy.

**Economics 3650hf. The Industrial Organization Workshop**  
Catalog Number: 3318  
Susan Athey 5334 (on leave fall term), Gregory M. Lewis 5868, and Ariel Pakes 1774
Speakers present current research in the field in a seminar setting.

*Economics 3660hf. The Law, Economics, and Organizations Workshop
Catalog Number: 4325
Lucian A. Bebchuk (Law School) 2042, Oliver S. Hart 3462, Louis E. Kaplow (Law School) 3223, Joshua Lerner (Business School) 1601, and Andrei Shleifer 2772 (on leave 2012-13)
Half course (throughout the year). M., 12:30–2.
The presentation of work in progress in the field of law, economics, and organizations.
Presentations by members of the various Harvard faculties, outside speakers, and graduate students.
Note: Offered jointly with the Law School as 96250-11 and with the Business School as 4670.

*Economics 3680hf. Research in Environmental Economics
Catalog Number: 1227
Robert N. Stavins (Kennedy School) 2093
Half course (throughout the year). Fall: F., at 12; Spring: F., 12–1:30.
Participants discuss recent research in environmental and natural resource economics and present their own work in progress.
Note: Open to doctoral students only.

*Economics 3723hfr. The Financial Economics Workshop
Catalog Number: 4107
John Y. Campbell 1230 (on leave 2012-13), Alp Simsek 6832, and Jeremy C. Stein 3752 (on leave 2012-13)
Half course (throughout the year). W., 4–5:30.
Outside speakers present current research in the field in a seminar setting.

*Economics 3810chfr. The Labor Economics Workshop
Catalog Number: 4066
Lawrence F. Katz, Roland G. Fryer, and Amanda D. Pallais
Half course (throughout the year). W., 4–5:30.
Outside speakers present research concerning the operation of labor markets.

Engineering Sciences

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION
Faculty of the School of Engineering and Applied Sciences Offering Instruction in Engineering Sciences

Ferran Adria, Visiting Lecturer on Creativity and Science
Joanna Aizenberg, Amy Smith Berylson Professor of Materials Science
Beth Altringer, Visiting Lecturer on Engineering Sciences
James G. Anderson, Philip S. Weld Professor of Atmospheric Chemistry
Michael J. Aziz, Gene and Tracy Sykes Professor of Materials and Energy Technologies
Katia Bertoldi, Assistant Professor of Applied Mechanics
Sujata K. Bhatia, Lecturer on Biomedical Engineering (Assistant Director for Undergraduate Studies for Biomedical Engineering)
Paul Blake Bottino, Lecturer on Entrepreneurial Studies
John Briscoe, Gordon McKay Professor of the Practice of Environmental Engineering
Federico Capasso, Robert L. Wallace Professor of Applied Physics and Vinton Hayes Senior Research Fellow in Electrical Engineering (on leave spring term)
Anas Chalah, Lecturer on Engineering Sciences
David R. Clarke, Gordon McKay Professor of Applied Physics
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Kenneth B. Crozier, Associate Professor of Electrical Engineering on the Gordon McKay Endowment
Marie D. Dahleh, Senior Lecturer on Engineering Sciences
David A. Edwards, Gordon McKay Professor of the Practice of Biomedical Engineering (on leave fall term)
Daniela Faas, Senior Preceptor in Design Instruction
Brian F. Farrell, Robert P. Burden Professor of Meteorology
Roy G. Gordon, Thomas Dudley Cabot Professor of Chemistry and Professor of Materials Science
Fawwaz Habbal, Senior Lecturer on Applied Physics
Donhee Ham, Gordon McKay Professor of Electrical Engineering and Applied Physics
Robert D. Howe, Abbott and James Lawrence Professor of Engineering, Area Dean for Bioengineering (Director of Undergraduate Studies for Biomedical Engineering)
Evelyn Hu, Gordon McKay Professor of Applied Physics and of Electrical Engineering, Area Dean for Electrical Engineering
Donald E. Ingber, Professor of Bioengineering
Daniel J. Jacob, Vasco McCoy Family Professor of Atmospheric Chemistry and Environmental Engineering
Neel S. Joshi, Assistant Professor of Chemical and Biological Engineering
Navin Khaneja, Gordon McKay Professor of Electrical Engineering
Zhiming Kuang, Gordon McKay Professor of Atmospheric and Environmental Science
H. T. Kung, William H. Gates Professor of Computer Science and Electrical Engineering
Jennifer Lewis, Hansjorg Wyss Professor of Biologically Inspired Engineering
Christopher Joseph Lombardo, Lecturer on Engineering Sciences
Marko Loncar, Tiantsai Lin Professor of Electrical Engineering
Yue Lu, Assistant Professor of Electrical Engineering
Amirhamed Majedi, Visiting Associate Professor in Engineering Sciences
2012-2013 Previous Courses of Instruction

Vinothan N. Manoharan, Associate Professor of Chemical Engineering and of Physics, Gordon McKay Professor of Chemical Engineering and Professor of Physics
Scot T. Martin, Gordon McKay Professor of Environmental Chemistry
Karena A. Mc Kinney, Lecturer on Environmental Science and Engineering
Michael B. McElroy, Gilbert Butler Professor of Environmental Studies
Harold McGee, Visiting Lecturer on Science and Cooking
David J. Mooney, Robert P. Pinkas Family Professor of Bioengineering
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Venkatesh Narayanamurti, Benjamin Peirce Professor of Technology and Public Policy (on leave 2012-13)
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of Applied Physics and of Molecular and Cellular Biology
Kevin K. Parker, Tarr Family Professor of Bioengineering and Applied Physics (on leave fall term)
Shriram Ramanathan, Associate Professor of Materials Science
James R. Rice, Mallinckrodt Professor of Engineering Sciences and Geophysics (on leave fall term)
Andrea Rose Sachdeva, Visiting Lecturer in the School of Engineering
Daniel P. Schrag, Sturgis Hooper Professor of Geology and Professor of Environmental Science and Engineering
Margo I. Seltzer, Herchel Smith Professor of Computer Science
Maurice A. Smith, Associate Professor of Bioengineering
Pia Malena Sorensen, Preceptor in Science and Cooking
Frans A. Spaepen, John C. and Helen F. Franklin Professor of Applied Physics (on leave spring term)
Zhigang Suo, Allen E. and Marilyn M. Puckett Professor of Mechanics and Materials
Vahid Tarokh, Perkins Professor of Applied Mathematics and Vinton Hayes Senior Research Fellow of Electrical Engineering
Patrick D. Ulrich, Lecturer on Environmental Science and Engineering
Avinash Raj Uttamchandani, Preceptor in Design Instruction
Chad D. Vecitis, Assistant Professor of Environmental Engineering
Joost J. Vlassak, Gordon McKay Professor of Materials Engineering, Area Dean for Materials Science and Mechanical Engineering
Conor J. Walsh, Assistant Professor of Mechanical and Biomedical Engineering
Gu-yeon Wei, Gordon McKay Professor of Electrical Engineering and Computer Science
David A. Weitz, Mallinckrodt Professor of Physics and of Applied Physics
Steven C. Wofsy, Abbott Lawrence Rotch Professor of Atmospheric and Environmental Science, Area Dean for Environmental Science and Engineering
Robert J. Wood, Charles River Professor of Engineering and Applied Sciences
Woodward Yang, Gordon McKay Professor of Electrical Engineering and Computer Science (on leave 2012-13)
Todd Zickler, William and Ami Kuan Danoff Professor of Electrical Engineering and Computer Science (Director of Undergraduate Studies for Engineering Sciences)
2012-2013 Previous Courses of Instruction

Other Faculty Offering Instruction in Engineering Sciences

Roger W. Brockett, An Wang Professor of Electrical Engineering and Computer Science, Emeritus
Colleen M. Hansel
Regina E. Herzlinger, The Nancy R. McPherson Professor of Business Administration (Business School)
Paul Horowitz, Professor of Physics and of Electrical Engineering, Emeritus
John W. Hutchinson, Abbott and James Lawrence Professor of Engineering and Gordon McKay Professor of Applied Mechanics, Emeritus
Margaret S. Livingstone, Professor of Neurobiology (Medical School)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
Donatello Materassi, Lecturer on Engineering Sciences
Ralph Mitchell, Gordon McKay Professor of Applied Biology, Emeritus
Peter P. Rogers, Gordon McKay Professor of Environmental Engineering, Emeritus
Sumeeta Srinivasan, Preceptor in Government
Patrick J. Wolfe


For information concerning concentration in Engineering Sciences, please consult the Director of Undergraduate Studies or the Office of Student Affairs, School of Engineering and Applied Sciences, Pierce Hall 110.

Primarily for Undergraduates

Engineering Sciences 1. Introduction to Engineering Sciences
Catalog Number: 0314
Todd Zickler and Sujata K. Bhatia
Half course (spring term). M., W., 1-2:30, and a weekly lab section to be arranged. EXAM GROUP: 6, 7
An integrative introduction to engineering sciences. Combines classroom discussion with activity-based learning, and emphasizes concepts that span multiple disciplines. Covers topics having direct societal impact, and presents them in historical context. Involves qualitative and quantitative analysis, mathematical modeling, and design. Introduces common engineering software and hardware tools.
Note: This course, when taken for a letter grade, meets the General Education requirement for either Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.
**Engineering Sciences 6. Environmental Science and Technology**  
Catalog Number: 2969  
Scot T. Martin, Chad D. Vecitis, Anas Chalah, and Patrick D. Ulrich  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

An introduction to the role of technology in the environmental sciences, with foci on energy and water topics. The basic scientific principles underlying human use and control of the environment are emphasized. The course includes several field trips.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science B.  
*Prerequisite:* The course presumes basic knowledge in chemistry, physics, and mathematics at the high school level.

**Engineering Sciences 20. How to Create Things and Have Them Matter**  
Catalog Number: 9676  
Enrollment: Limited to 12.  
David A. Edwards  
*Half course (spring term). M., W., 1–3. EXAM GROUP: 6, 7*

This aspirational design course teaches students to generate, develop and realize breakthrough ideas in the arts, sciences, and engineering. Students learn basic skills of engineering design, brainstorming, prototyping, and public presentations. Funding is available for continued project development following the course. This year’s theme is "Synthetic Biology."  
*Note:* Open to all students by permission of instructor.

**Engineering Sciences 21. The Innovator’s Practice: Finding, building and leading good ideas with others**  
Catalog Number: 70925  
Enrollment: Limited to 25. Permission of instructor required.  
Beth Altringer  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Students gain experience overcoming many under-represented challenges of becoming an innovator, including: identifying your intrinsic motivations, finding related good ideas, working effectively with others to develop them, and leading innovative professional projects to implementation. Students apply human-centered design processes (observing, interpreting, ideating, testing, refining, planning) to stimulate innovation, negotiate, strategize, and build and lead cooperative teams. Features guest speakers from industry, academia, and involves collaborating with cutting-edge companies.

**Engineering Sciences 22. Design Survivor: Experiential Lessons in Designing for Desirability - (New Course)**  
Catalog Number: 87699  
Enrollment: Limited  
Beth Altringer  
*Half course (spring term). M., W., 10–12. EXAM GROUP: 3, 4*

Multi-disciplinary course for students interested in designing products and services that are simple, irresistible, delightful, cool, covetable, viral, and, increasingly in today’s day and age, much more likely to be successful. Students study real world cases of how organizations (e.g., Apple, Gucci, Swarovski) strategically design for desirability. In weekly design challenges, students use analogical transfer to apply these insights to diverse industries and target markets (e.g., health literacy campaigns, declining technologies, the future of luxury). Weekly critique
panels with experts enable students to develop their own design point of view and to finish with a diverse design portfolio.

*Note:* Permission required for all students.

**Engineering Sciences 50. Introduction to Electrical Engineering**

Catalog Number: 4499

Marko Loncar and Evelyn Hu

*Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8*

A discussion of topics of central importance to the fields of electronics, communications and intelligent systems. The material concerns both qualitative and quantitative analysis, as well as laboratory experiments and computer simulations. Examples of topics to be discussed range from relatively simple modules such as analog amplifiers and digital adders, to complex devices such as cell-phones and their supporting infrastructure.

*Note:* Students who have taken 100-level courses in electrical engineering will not be allowed to enroll in Engineering Sciences 50. This course, when taken for a letter grade, meets the General Education requirement for either Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

**Engineering Sciences 51. Computer-Aided Machine Design**

Catalog Number: 0322 Enrollment: Limited to 15.

Daniela Faas (spring term) and Conor J. Walsh (fall term)

*Half course (fall term: repeated spring term). Fall: M., W., F., at 10; Spring: M., W., F., at 12. EXAM GROUP: Fall: 3; Spring: 5*

A first course in the design and construction of mechanical and electromechanical devices. Engineering graphics and sketching; dimensions and tolerances. Introduction to materials selection and structural design. Machine elements and two-dimensional mechanisms; DC motors. Design methodology. Emphasis on laboratory work and design projects using professional solid modeling CAD software and numerically controlled machine tools.

*Note:* Intended for freshmen and sophomores. This course, when taken for a letter grade, meets the Core requirement for Science A.

**Prerequisite:** Mathematics 1b (may be taken concurrently); high school physics.

**Engineering Sciences 53. Quantitative Physiology as a Basis for Bioengineering**

Catalog Number: 3604

Maurice A. Smith and Sujata K. Bhatia

*Half course (full term). M., W., F., at 12. EXAM GROUP: 5*

A foundation in human organ systems physiology, including cardiac, respiratory, renal, gastrointestinal, and neural systems. Quantitative description of organ systems function and control in terms of physical principles and physiologic mechanisms. Simple mathematical models representing key aspects of organ systems function. Emphasis will be given to understanding the ways in which dysfunction in these systems gives rise to common human disease processes.

*Note:* Open to freshmen.
*Engineering Sciences 91r. Supervised Reading and Research
Catalog Number: 1113
Todd Zickler
Half course (fall term; repeated spring term). Hours to be arranged.
Guided reading and research.
Note: Normally open to candidates accepted for work on a specific topic by a member of the teaching staff of the School of Engineering and Applied Sciences. Normally may not be taken for more than two terms; may be counted for concentration in Engineering Sciences if taken for graded credit. Applicants should file a project sheet before study cards are filed. Project sheets may be obtained from the Student Affairs Office, Pierce Hall 110.

*Engineering Sciences 95r. Startup R & D - (New Course)
Catalog Number: 60126 Enrollment: Limited
Paul Blake Bottino
Half course (fall term; repeated spring term). Hours to be arranged.
Students do field-based work to develop their existing startups or explore new ideas and opportunities for startup design. The course is for students seeking actual experience as a founder of a startup, whether commercial, social or another type of innovative project. Students may work individually; teams are preferred. Requires self-directed, independent work and active search for and outreach to mentors, customers, and partners for guidance and feedback in addition to that provided by the instructor. Students will share their work regularly and engage in peer-to-peer feedback forum.
Note: Enrollment limited; permission of instructor required.

*Engineering Sciences 96. Engineering Problem Solving and Design Project
Catalog Number: 8461
David J. Mooney, Fawwaz Habbal, Kevin K. Parker, and Margaret S. Livingstone (Medical School) (spring term),
Half course (fall term; repeated spring term). Fall: M., W., 9–11; Spring: Section 1: M., Th., 3–5; Section 2: M., W., 1–3.
Semester-long team project that provides engineering experience working with clients on real-world problems. Projects provide exposure to problem definition, performance measurement, quantitative analysis, modeling, generation of creative solutions, engineering design trade-offs, and documentation/communication skills. Ordinarily taken in the junior year.
Note: Preference given to SB candidates.

Cross-listed Courses

Earth and Planetary Sciences 52. Introduction to Global Geophysics - (New Course)

*Freshman Seminar 21s. Germs

For Undergraduates and Graduates

Additional courses of interest to students in Electrical Engineering include: Computer Sciences 141, 143, and 148.
*Engineering Sciences 100. Engineering Design Projects*
Catalog Number: 4268
Robert J. Wood

*Half course (fall term; repeated spring term). Th., 4–6. EXAM GROUP: Spring: 18*

Individual design projects, with multiple realistic constraints, selected to provide experience in the processes and practice of engineering design. Requires proficiency in electronic circuit construction, mechanical fabrication techniques, or software engineering. Students will develop a solution to an open-ended engineering problem which will be demonstrated at the end of the course.

*Note:* Ordinarily taken in the senior year. This one-term version of Engineering Sciences 100hf is open only to students in special circumstances. Enrolled students are required to file a proposed project form with the Student Affairs Office, Pierce 110, early in the term. Project approval rests with the SEAS Design Advisory Committee.

*Prerequisite:* *Engineering Sciences 96.

*Engineering Sciences 100hf. Engineering Design Projects*
Catalog Number: 7535
Robert J. Wood

*Half course (throughout the year). Th., 4–6. EXAM GROUP: 18*

Individual design projects, with multiple realistic constraints, selected to provide experience in the processes and practice of engineering design. Requires proficiency in electronic circuit construction, mechanical fabrication techniques, or software engineering. Students will develop a solution to an open-ended engineering problem which will be demonstrated at the end of the course.

*Note:* Ordinarily taken in the senior year. Enrolled students are required to file a proposed project form with the Student Affairs Office, Pierce Hall 110, early in the term. Project approval rests with the SEAS Design Advisory Committee.

*Prerequisite:* *Engineering Sciences 96.

*Engineering Sciences 103. Spatial Analysis of Environmental and Social Systems*
Catalog Number: 9277
Sumeeta Srinivasan

*Half course (spring term). Tu., Th., 11:30–1.*

Introduces the fundamental statistical and mapping tools needed for analysis of environmental systems. Topics will be linked by environmental and social themes and will include GIS concepts; data models; spatial statistics; density mapping; buffer zone analysis; surface estimation; map algebra; suitability modeling. Students will acquire technical skills in both mapping and spatial analysis. Software packages used will include ArcGis. There will be guest lectures by researchers and practitioners who use GIS for spatial analysis.

*Prerequisite:* Applied Mathematics 21 or equivalent.

*Engineering Sciences 110. Science, Engineering, and the Community*
Catalog Number: 0452 Enrollment: Limited to 15.

Vinothan N. Manoharan

*Half course (fall term). M., 5–7:30 p.m.*

Activity-based course for beginning/intermediate science and engineering undergraduates.
Combines readings and discussions on techniques for learning science and engineering design with implementation in an 8th grade science class in Cambridge. Students work directly with the 8th graders to guide how they learn. Students apply what they discover to improve their own understanding of college-level science and engineering.

Note: Offered in alternate years.
Prerequisite: Interest in science, engineering, learning, and outreach.

**Engineering Sciences 120. Introduction to the Mechanics of Solids**
Catalog Number: 1493
Joost J. Vlassak

*Half course (spring term). M., W., F., at 1. EXAM GROUP: 6*

A first course in the mechanical sciences which introduces elements of continuum mechanics and explains how materials and structures stretch, bend, twist, shake, buckle, and break. Stress-strain behavior of materials. Statically determinate and indeterminate structures. Stress and strain, equations of motion or equilibrium, strain-displacement relations. Torsion. Beam theory with applications to beam deflections, vibrations, and buckling. Three laboratory sessions required.

Prerequisite: Physics 11a or 15a, and Applied Mathematics 21a or Mathematics 21a (previously) and Applied Mathematics 21b or Mathematics 21b (previously or concurrently).

**Engineering Sciences 123. Introduction to Fluid Mechanics and Transport Processes**
Catalog Number: 8323
Daniel Joseph Needleman

*Half course (spring term). M., W., F., at 10, and laboratory. EXAM GROUP: 3*


Prerequisite: Applied Mathematics 21a,b or Mathematics 21a,b.

**Engineering Sciences 125. Mechanical Systems**
Catalog Number: 7274
Katia Bertoldi

*Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7*

Modeling and analysis of mechanical and electromechanical systems. Topics include 3D rigid body dynamics, resonance, damping, frequency response, Laplace transform methods, Lagrange’s equations, multiple degree-of-freedom systems and an introduction to nonlinear vibration, continuous systems, and control. Analytical modeling will be supplemented with numerical simulations and lab experiments. Laboratory exercises will explore vibration, stabilization, and nonlinear systems using data acquisition systems.

Prerequisite: Applied Mathematics 21a,b or Mathematics 21a,b or Mathematics 23a,b; Physics 11a or 15a.

[Engineering Sciences 128. Computational Solid and Structural Mechanics]
Katia Bertoldi
Half course (spring term). Tu., Th., 1–2:30 and a weekly section to be arranged. EXAM GROUP: 15, 16
Introduction to finite element methods for analysis of steady-state and transient problems in solid, structural, fluid mechanics, and heat transfer. Implementation of simple MATLAB codes and use of existing general-purpose programs (ABAQUS and COMSOL).
Note: Expected to be given in 2013–14. Offered alternate years.
Prerequisite: Engineering Sciences 120 or equivalent introduction to the mechanics of deformable materials and fluids. Engineering Sciences 123 may be taken concurrently.

Engineering Sciences 135. Physics and Chemistry: In the Context of Energy and Climate at the Global and Molecular Level
Catalog Number: 98766 Enrollment: Limited to 30.
James G. Anderson
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
A solution to the problems set by the intersection of global energy demand and climate feedbacks requires the teaching of physics and chemistry in that context. Core topics include thermodynamics, free energy, entropy, acid-base and oxidation-reduction reactions, electrochemistry, electromagnetic induction, circuit theory, AC and DC circuits, the nature of photons and of electromagnetic radiation, photochemistry, materials, catalysis, kinetics, molecular bonding, and biological processes for energy conversion and storage.
Note: ES 135 is also offered as EPS 135. Students may not take both EPS 135 and ES 135 for credit.
Prerequisite: Physical Sciences 1, or Physical Sciences 11, or permission of instructor.

Engineering Sciences 139. Innovation in Science and Engineering: Conference Course
Catalog Number: 0994
David A. Weitz, Paul Blake Bottino, and David S. Ricketts
Half course (fall term). M., at 2:30, W., 2:30–4:30. EXAM GROUP: 7, 8, 9
Explores factors and conditions contributing to innovation in science and engineering; how important problems are found, defined, and solved; roles of teamwork and creativity; and applications of these methods to other endeavors. Students receive practical and professional training in techniques to define and solve problems, and in brainstorming and other individual and team approaches.
Note: Taught through a combination of lectures, discussions, and exercises led by innovators in science, engineering, arts, and business.

Engineering Sciences 150. Introduction to Probability with Engineering Applications
Catalog Number: 8997
Yue Lu
Half course (spring term). Tu., Th., 11:30–1; Tu., at 3; W., at 4. EXAM GROUP: 13, 14
This course introduces students to probability theory and statistics, and their applications to physical, biological and information systems. Topics include: random variables, distributions and densities, conditional expectations, Bayes’ rules, laws of large numbers, central limit theorems, Markov chains, Bayesian statistical inferences and parameter estimations. The goal of this course is to prepare students with adequate knowledge of probability theory and statistical methods.
which will be useful in the study of several advanced undergraduate/graduate courses (e.g. digital communications, signal processing, control theory, detection and estimation, information theory, communication networks) and in formulating and solving practical engineering problems. Prerequisite: Mathematics 21a or Applied Mathematics 21a, and Mathematics 21b or Applied Mathematics 21b.

**Engineering Sciences 151. Applied Electromagnetism**
Catalog Number: 5742
Donhee Ham
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Electromagnetism and its applications in science and technology. Topics: Maxwell’s equations; electromagnetic waves (e.g., light, microwaves, etc.); wave propagation through media discontinuity; transmission lines, waveguides, and microwave circuits; radiation and antennae; interactions between electromagnetic fields and matters; optics of solids; optical devices; origin of colors; interference and diffraction; lasers and masers; nuclear magnetic resonance and MRI; radio astronomy; wireless networking; plasmonic wave (charge density wave). Prerequisite: Basic electromagnetism (Physics 11b or 15b or equivalent), basic vector calculus (Applied Math 21a or equivalent), basic differential equations (Applied Math 21b or equivalent) and familiarity with Fourier analysis (Applied Math 21b or equivalent).

**Engineering Sciences 154. Electronic Devices and Circuits**
Catalog Number: 6319
Donhee Ham
Half course (fall term). Tu., Th., 2:30-4, and laboratory to be arranged. EXAM GROUP: 16, 17
Design of electronic circuits (including integrated circuits) using semiconductor transistors. Topics: the physics of electrical conduction; the physics of semiconductors; bipolar transistors; field effect transistors; single- and multi-stage amplifiers; operational amplifiers; frequency responses and stability; feedback circuits; the physics of noise; self-sustained oscillators; phase-locked loops. Prerequisite: Familiarity with differential equations and Fourier analysis (Applied Mathematics 21b or Mathematics 21b), familiarity with basic electricity (Physics 11b or 15b).

**Engineering Sciences 155. Biological Signal Processing - (New Course)**
Catalog Number: 63833
Vahid Tarokh
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
General properties of common biosignals, Bioelectrical (electrophysiological), Biomechanical, Biomagnetic, and Biochemical signals, Bioelectrical acquisition process. Brief discussion of bio-signals obtained from tomography and inverse imaging. Brief introduction to underlying principles of MRI, Ultrasound, CT-Scan, PET, and SPECT, and their associated signals, inverse imaging, ill-posed problems and regularization. Non-transformed and transformed methods for biosignal processing. Structural and Graphical descriptions. Overview of Fourier transforms, Sine and cosine transform, Wavelet transform, Principle Component Analysis, dimension reduction techniques. Blind Source Separation, Representation models based on the statistical independence of the underlying sources, Independent component analysis (ICA), Dependent component analysis, Independent Subspace separation, Pattern Recognition, neural networks,
clustering, and genetics algorithms. Applications to Biosignal Processing, and Human computer interaction.

**Prerequisite:** AM21a (knowledge of AM21b can be helpful).

**Engineering Sciences 156. Signals and Systems**  
Catalog Number: 6284  
Vahid Tarokh  
Half course (spring term). Tu., Th., 10-11:30, and weekly one hour Matlab section and one hour problem section to be arranged. EXAM GROUP: 12, 13  
**Prerequisite:** Applied Mathematics 21b or Mathematics 21b.

**Engineering Sciences 159. Introduction to Robotics**  
Catalog Number: 3126  
Robert J. Wood  
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
Introduction to computer-controlled robotic manipulators. Topics include coordinate frames and transformations, kinematic structure and solutions, statics and dynamics of serial and parallel chain manipulators, control and programming, introduction to path planning, introduction to teleoperation, robot design, and actuation and sensing devices. Laboratory exercises provide experience with industrial robot programming and robot simulation and control.  
**Note:** Offered in alternate years.  
**Prerequisite:** Computer Science 50, and either Engineering Sciences 125 or 156.

**Engineering Sciences 162. Hydrology and Environmental Geomechanics**  
Catalog Number: 4163  
James R. Rice  
Half course (spring term). M., W., F., at 11, for three one-hour lecture sessions and 1 and a half hour lab session or section for discussion of assigned problems. EXAM GROUP: 4  
**Note:** Engineering Sciences 162 is also offered as Earth and Planetary Sciences 162. Students may not take both Engineering Sciences 162 and Earth and Planetary Sciences 162 for credit.  
**Prerequisite:** Applied Mathematics 21a,b or Mathematics 21a,b and Physics 11a,b or 15a,b.

**Engineering Sciences 164. Soil and Environmental Chemistry**  
Catalog Number: 4099  
Karena A. Mc Kinney and Patrick D. Ulrich
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
Basic concepts, principles, and applications of environmental chemistry for students in Earth and environmental sciences. We will investigate a variety of environmental chemistry topics relevant for soil environmental systems, including soil mineralogy, water chemistry, redox reactions, precipitation/dissolution, and ion sorption. The principal goal is to explore and apply the fundamental chemical principles to understand Earth processes and solve complex environmental problems.
Note: Cannot be taken for credit by students who have already taken ENG-SCI 264.
Prerequisite: Physical Sciences 1 or permission of the instructor.

**Engineering Sciences 165. Water Engineering**
Catalog Number: 4274
Chad D. Vecitis, Anas Chalah, and Scot T. Martin
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Introduces the fundamentals of water biology, chemistry, physics and transport processes needed to understand water quality and water purification technologies. Practical instruction in basic water analyses concluding with a final drinking water treatment project in place of exam.
Prerequisite: Physical Sciences 1 or Physical Sciences 10 or equivalent and Engineering Sciences 6 or equivalent.

**Engineering Sciences 169. Seminar on Global Pollution Issues: Case Study of Mercury Biogeochemistry - (New Course)**
Catalog Number: 59143
Elynor M. Sunderland (School of Public Health)
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
This course provides a cross-disciplinary overview of environmental science and how research contributes to public policy and human health risk assessment through a case study of a global pollution issue: mercury biogeochemistry. The scientific foundations of environmental research methods are discussed (i.e., analytical chemistry, ecology, use of environmental archives, environmental modeling). Hands on experience conducting multidisciplinary environmental research and original field data analysis will be provided. Course Activities: Lectures, discussions, case studies, field/lab visits.
Prerequisite: Two semesters of undergraduate chemistry including Physical Sciences 1 or Physical Sciences 11; Mathematics 1a & 1b. Knowledge of basic statistics is also helpful.

**Engineering Sciences 173. Introduction to Electronic and Photonic Devices**
Catalog Number: 3490
Evelyn Hu and Christopher Joseph Lombardo
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
This course will focus on physical principles underlying semiconductor devices: electrons and holes in semiconductors, energies and bandgaps, transport properties of electrons and holes, p-n junctions, transistors, light emitting diodes, lasers, solar cells and thermoelectric devices.
Prerequisite: Physics 11a and b, or Physics 15a and b or equivalent (mechanics; electromagnetism); undergraduate level quantum mechanics highly useful, but not required.
**Engineering Sciences 176. Introduction to MicroElectroMechanical System**
Catalog Number: 20243 Enrollment: Limited to 25.
Fawwaz Habbal and Anas Chalah
Half course (fall term). Tu., 5:30–7:30 p.m. EXAM GROUP: 18
This course introduces student to the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS). It teaches fundamentals of micro machining and Micro fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques, and surface, bulk, and electroplating micro machining technologies.
Prerequisite: Physics 11a,b or 15a,b; College Chemistry at the level of Life Sciences 1a and Physical Sciences 1.

**Engineering Sciences 177. Microfabrication Laboratory - (New Course)**
Catalog Number: 96807
Kenneth B. Crozier
Half course (spring term). M., at 10, and weekly 3-hour laboratory. EXAM GROUP: 3
Introduction to micro- and nanofabrication processes used for photonic and electronic devices. Students use state-of-the-art cleanroom in Center for Nanoscale Systems to fabricate transistors and light-emitting diodes (LEDs). Lectures on fabrication processes, including lithography, deposition, etching, oxidation, implantation, diffusion and electrical characterization.
Prerequisite: Physics 11a and Physics 11b; or Physics 15a and 15b or equivalent.

**Engineering Sciences 181. Engineering Thermodynamics**
Catalog Number: 3889
Michael J. Aziz
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Prerequisite: One semester of calculus-based college-level physics. Chemistry at the high school Advanced Placement level.

**Engineering Sciences 183. Introduction to Heat Transfer - (New Course)**
Catalog Number: 16727
David R. Clarke
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
The macroscopic description of the fundamentals of heat transfer and applications to practical problems in energy conversion, electronics and biological systems with an emphasis on developing a physical and analytical understanding of conductive, convective and radiative heat transfer. Emphasis will also be given to problem solving skills based on applying governing principles, mathematical models and physical intuition. Monthly laboratory sessions.
Prerequisite: Applied Math 21a (Mathematical Methods in Science) and Engineering Sciences 181 (Engineering Thermodynamics).

Engineering Sciences 190. Introduction to Materials Science and Engineering
Catalog Number: 6973
Shriram Ramanathan
Half course (fall term). M., W., 11–12:30. EXAM GROUP: 4, 5
Introduction to the structure, properties, and applications of materials. Crystal structure and defects. Phase transformations: phase diagrams, diffusion, nucleation and growth. Mechanisms of deformation and fracture. Effect of microstructure on properties. Examples from a variety of engineering applications will be discussed.
Prerequisite: Physics 11 or 15, and Applied Mathematics 21a,b or Mathematics 21a,b.

Engineering Sciences 198r. Probability Applications in Social Engineering - (New Course)
Catalog Number: 66894
Kevin K. Parker
Half course (spring term). M., 11–2. EXAM GROUP: 4, 5, 6
Introductory statistical methods for students in the applied sciences and engineering with a focus on social networks. Random variables and probability distributions; the concept of random sampling, including random samples, statistics, and sampling distributions; role of statistics in social network analysis; mathematical interpretation of social networks; connections and homophily, propinquity, mutuality/reciprocity, multiplexity, network closure; distributions and bridges, distance, centrality, density; segmentation and cliques, cohesion, clustering; graph theory and adjacency matrices; Erdos-Rényi model; Watts-Strogatz Small World model; Barabási-Albert (BA) Preferential Attachment model; special topics in social network analysis.
Prerequisite: Applied Mathematics 21b or Mathematics 21b or equivalent.

Cross-listed Courses

Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis
*Biomedical Engineering 121 (formerly *Engineering Sciences 122). Cellular Engineering
Biomedical Engineering 125 (formerly Engineering Sciences 130). Tissue Engineering
Biomedical Engineering 130 (formerly Engineering Sciences 149). Neural Control of Movement
Earth and Planetary Sciences 133. Atmospheric Chemistry
Physics 129. Energy Science
[Physics 136. Physics of Medical Imaging]
Societies of the World 47. Contemporary South Asia: Entrepreneurial Solutions to Intractable Social & Economic Problems

Primarily for Graduates
Additional courses of interest to graduate students in Electrical Engineering includes Computer Sciences 246r. Additional courses of interest to graduate students in Decision, Control, and Communication include Economics 2010a, 2010b, 2010c, 2120, 2140; Statistics 110, 171.

**Engineering Sciences 201. Decision Theory**

Catalog Number: 2362  
Navin Khaneja  
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3  
Prerequisite: Applied Mathematics 21a,b or Mathematics 21a,b, and Statistics 110 or equivalents.

**Engineering Sciences 202. Estimation and Control of Dynamic Systems**

Catalog Number: 5080  
Donatello Materassi  
Half course (fall term). M., W., 4–5:30. EXAM GROUP: 9  
Study of dynamical systems with deterministic and stochastic inputs. Controllability and observability, linear quadratic control, dynamic programming and the Pontryagin maximum principle, Stochastic models and Kalman-Bucy filtering. Applications from engineering and economics.  
Prerequisite: Linear differential equations, matrix algebra, and introductory probability as covered in Mathematics 21a, b and Engineering Sciences 150 or equivalents.

**Engineering Sciences 203. Stochastic Control**

Catalog Number: 6982  
Donatello Materassi  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
Prerequisite: Applied Mathematics 104 (formerly Applied Mathematics 105a), Applied Mathematics 105 (formerly Applied Mathematics 105b), or equivalent. Some prior exposure to probability; Engineering Sciences 202 desirable but not essential.

[*Engineering Sciences 207. Communicating Science |*  
Catalog Number: 5993 Enrollment: Limited to 12.  
Cornelia Dean  
Half course (fall term). M., 1–4. EXAM GROUP: 6, 7, 8  
Climate change, health insurance reform, space exploration, the teaching of science and a host of other issues - today Americans confront more and more important public debates in which the argument hangs on technical issues. On the whole, however, they have difficulty dealing with these issues, in large part because the scientists and engineers who could help them are missing
from the debate. This course is designed for graduate students in engineering and the biological and physical sciences who are interested in learning how to engage with the public on these and other issues. It also offers useful guidance on how to explain their own work - writing, speaking and online - intelligently and intelligibly.

*Note:* Expected to be given in 2013–14.

**Engineering Sciences 209. Nonlinear Control Systems**
Catalog Number: 1194
*Navin Khaneja*
*Half course (fall term). Tu., Th., 10–11:30.*
Study of nonlinear input-output systems including controllability, observability, uniqueness of models, stability, and qualitative behavior of nonlinear dynamical systems. Differential geometry and Lie theory methods developed to study control of classical and quantum mechanical systems.

**[Engineering Sciences 210. Mathematical Programming]**
Catalog Number: 5499
*Donald G. M. Anderson*
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
Introduction to basic optimization techniques. Linear programming: the simplex method and related algorithms, duality theory, interior-point methods. Unconstrained optimization, nonlinear programming, convexity.

*Note:* Expected to be omitted in 2012-2013.
*Prerequisite:* Applied Mathematics 104 (formerly Applied Mathematics 105a) and Applied Mathematics 105 (formerly Applied Mathematics 105b); Applied Mathematics 120 or Mathematics 121, would be helpful, but not required.

**[*Engineering Sciences 211. Cardiac Biophysics]***
Catalog Number: 3906
*Kevin K. Parker*
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
An in depth review of contemporary theories in the physics of the heart. The class begins with an overview of cardiac physiology, including an in depth examination of cardiac excitation and excitation-contraction coupling. Cardiac membrane channels, the action potential (Hodgkin-Huxley and Luo-Rudy models), and action potential propagation (cable and bidomain models). Arrhythmias, drugs, and defibrillation. The class will rely heavily on the current literature in the field.

*Prerequisite:* Electromagnetic fields, calculus, cell biology, physiology, and MATLAB programming experience is helpful, but not necessary.

Catalog Number: 30956
*Daniel Joseph Needleman*
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
Cell biology – from foundations to current research topics. Intended for students without cell/molecular biology training. Cell architecture, molecular and phenomenological aspects,
signaling, organelle form/function, trafficking, quantitative experimental techniques, models of cellular organization and dynamics.

*Note:* Expected to be given in 2013–14. Offered in alternate years.

**Engineering Sciences 220. Fluid Dynamics**

*Catalog Number: 2759*

*L. Mahadevan*

*Half course (fall term). Tu., Th., 11–12:30 and a supplementary weekly meeting for problem discussion (or make-up sessions), M. at 3 pm. EXAM GROUP: 13, 14*


*Prerequisite:* Familiarity with dynamics, vectors, multivariable calculus, and partial differential equations. An undergraduate course in fluid dynamics or other continuum mechanics is strongly recommended.

[*Engineering Sciences 221. Drug Delivery*]

*Catalog Number: 8223 Enrollment: Limited to 30.*

*Debra T. Auguste*

*Half course (fall term). M., W., 2:30–4.*


*Note:* Expected to be given in 2013–14.

*Prerequisite:* Mathematics 21a,b or Applied Mathematics 21a,b, and Chemistry 5 or Life Sciences 1a.

**Engineering Sciences 222. Advanced Cellular Engineering**

*Catalog Number: 0696*

*Neel S. Joshi*

*Half course (fall term). M., W., 10–12, and laboratory to be arranged. EXAM GROUP: 3, 4*

Summary of the physical laws governing cellular homeostasis; role of the tissue microenvironment on cell life, death, and differentiation; control of cellular function and genetic programs by adhesion to substrates; signal transduction pathways and cellular metabolic control; mechanochemical and mechanoelectrical signal transduction; cell motility; clinical and industrial applications of engineered cells. The course will contain a laboratory section that will introduce students to basic cell culture techniques, micropatterning of extracellular matrix, and microfluidics. Students are expected to participate in all lecture and laboratory exercises. Assignments will include a presentation on a cellular engineering topic of their choosing, subject to instructor approval, with handouts, homework, and examination questions. Final projects will be based on either the completion of an original laboratory experiment or an NIH-style proposal of original research. Undergraduates may enroll in this course with approval from the instructor.
Prerequisite: Organic chemistry, cell biology, physics at the level of 11a.b. Suggested courses include molecular biology.

[Engineering Sciences 224. Laboratory in Engineering and Physical Biology]
Catalog Number: 4136
Nancy Kleckner and Mara Prentiss
Half course (spring term). M., W., 1–5. EXAM GROUP: 6, 7, 8, 9
A project-oriented laboratory course which will integrate genetic, molecular, biochemical and cytological approaches from the life sciences with optical, magnetic and mechanical approaches from the physical sciences. Interesting and original experiments will be organized around a common theme which, this year, will be "Biomechanics of E. coli."
Note: Expected to be given in 2013–14. Intended primarily for first year graduate students in the EPB PhD track but available to other graduate students and advanced undergraduates as space and resources permit.

[Engineering Sciences 226r. Special Topics in Neural Engineering: Learning and Memory in Neural Systems]
Catalog Number: 3086
Maurice A. Smith
Course will present classical findings and new research that give insight into mechanisms of learning and memory formation in neural systems. Learning and memory will be studied both as neurobiological phenomena and as computational challenges.
Note: Offered in alternate years.
Prerequisite: Applied Mathematics 105a and 105b, probability and statistics.

*Engineering Sciences 227. Medical Device Design
Catalog Number: 73679 Enrollment: Limited to 16.
Conor J. Walsh
Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8
Project-based course on the design of medical devices to address needs identified by hospital-based clinicians. Students work in teams with physicians to develop a novel device. The design process includes: needs finding; problem identification; prior art searches; strategy and concept generation; estimation; sketching; sketch modeling; machine elements, ergonomics and prototyping.
Prerequisite: ES 51 or machine design experience. Graduate course, but open to qualified junior and senior undergraduates.

Engineering Sciences 228. Biomaterials
Catalog Number: 49617
Neel S. Joshi
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Overview of materials for biomedical devices and therapies. Polysaccharide- and protein-based polymers as building blocks. Biological templating of inorganic structures. Emerging frontiers in protein and DNA self-assembly. Molecular scale origin of materials properties for naturally occurring biological materials and the use of this information to rationally design new
biomaterials for specific applications.

Prerequisite: Organic chemistry, cell biology, physics at the level of 11a.b. Suggested courses include molecular biology.

*Engineering Sciences 229. Survey of Energy Technology - (New Course)
Catalog Number: 94822
Michael J. Aziz
Half course (spring term). W., F., 2:30–4. EXAM GROUP: 7, 8
Principles governing energy generation and interconversion. Current and projected world energy use. Selected important current and anticipated future technologies for energy generation, interconversion, storage, and end usage.
Note: Graded sat/unsat only. Cannot be used for SEAS concentration credit. Students may not take both Engineering Sciences 229 and Engineering Sciences 231 for credit.
Prerequisite: Calculus of a single variable, one semester of college-level physics, and familiarity with chemistry at the high school advanced placement level.

Engineering Sciences 230. Advanced Tissue Engineering
Catalog Number: 5718
David J. Mooney
Half course (spring term). Tu., Th., 1–2:30; and a weekly lab meeting Tu., at 12. EXAM GROUP: 15, 16
Fundamental engineering and biological principles underlying field of tissue engineering, along with examples and strategies to engineer specific tissues for clinical use. Student design teams prepare a research proposal and participate in a weekly laboratory.
Prerequisite: Biochemistry or cell biology background.

*Engineering Sciences 231. Energy Technology
Catalog Number: 1486
Michael J. Aziz
Half course (spring term). W., F., 2:30–4. EXAM GROUP: 7, 8
Principles governing energy generation and interconversion. Current and projected world energy use. Selected important current and anticipated future technologies for energy generation, interconversion, storage, and end usage.
Note: Students may not take both Engineering Sciences 231 and Engineering Sciences 229 for credit.
Prerequisite: One semester of college-level calculus-based physics and familiarity with chemistry at the high school advanced placement level.

*Engineering Sciences 233a. Innovating in Health Care - (New Course)
Catalog Number: 67397
Margo I. Seltzer and Regina E. Herzlinger (Business School)
Half course (fall term). Tu., 1:30–4:30; plus 3 hours of section M., W., 3–4:30. EXAM GROUP: 15, 16, 17, 18
This course helps students to create successful entrepreneurial health care ventures by enabling them to: 1) Identify the alignment between an entrepreneurial health care venture and the six forces that shape health care - structure, financing, technology, consumers, accountability, and
public policy; and 2) Create a product and business model that responds appropriately to any misalignments. The course covers four modules: The analytic framework, case studies of the six forces, case studies of firms responses to the forces, and student presentation of business plans. 

*Note:* Must be taken concurrently with ES233b. Offered jointly with the Business School as 6340.


Catalog Number: 59443

*Margo I. Seltzer and Regina E. Herzlinger (Business School)*

**Half course (fall term). M., W., 1:30–3; plus one hour of section Th., at 3. EXAM GROUP: 6, 7**

This is a field study course in which students undertake significant external research in the in-depth development of a business plan for a health-care and technology business venture. Students will learn to develop such a business plan, evaluate and select appropriate technologies, define a new technology based product in the health-care space, and develop appropriate prototypes for presentation to customers and investors. 

*Note:* Must be taken concurrently with ES233a. Offered jointly with the Business School as 6180.

**Engineering Sciences 239. Advanced Innovation in Science and Engineering: Conference Course**

Catalog Number: 8303

*David A. Weitz, Paul Blake Bottino, and David S. Ricketts*

**Half course (fall term). M., at 2:30, W., 2:30–4:30. EXAM GROUP: 7, 8, 9**

Students are expected to meet all the requirements of Engineering Sciences 139 and in addition are required to prepare an individual term project with significant analytic emphasis in an area of scientific or technological innovation.

**Engineering Sciences 240. Solid Mechanics**

Catalog Number: 2984

*Joost J. Vlassak*

**Half course (fall term). M., W., F., at 10, and a weekly section to be arranged. EXAM GROUP: 3**


*Prerequisite:* Applied Mathematics 105 (formerly Applied Mathematics 105b) or equivalent; introduction to solid mechanics at the level of Engineering Sciences 120, or Earth and Planetary Sciences 108 or 166, or Applied Physics 293.

**Engineering Sciences 241. Advanced Elasticity**

Catalog Number: 6711

*Zhigang Suo*

**Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13**

Finite deformation; instabilities; thermodynamics; thermoelasticity; poroelasticity; electroactive polymers, hydrogels, polyelectrolyte gels

*Note:* Offered in alternate years.

*Prerequisite:* Engineering Sciences 240 and Applied Mathematics 201 or equivalents.
**Engineering Sciences 242r. Solid Mechanics: Advanced Seminar**  
Catalog Number: 5379  
Katia Bertoldi  
*Half course (spring term). Tu., Th., 1:30–3. EXAM GROUP: 15, 16*  
Finite elements for analysis and design. The key goal of this class is the application of the finite element method to classical and state-of-the-art modeling and design problems. We introduce a commercial finite element program - ABAQUS - and demonstrate how to use it in modeling and analysing design problems. Topics include the implementations of user-defined subroutines (UMAT and VUMAT), instability analyses, analysis of waves propagation, fluid-structure interactions.  
*Prerequisite:* Engineering Sciences 240 or equivalent. To take this course, basic knowledge and general interest in finite elements, mathematics, strength of materials, structural and solid mechanics is highly recommended.

**Engineering Sciences 246. Plasticity**  
Catalog Number: 4271  
Zhigang Suo  
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*  
*Prerequisite:* Engineering Sciences 240, or equivalent.

**[Engineering Sciences 247. Fracture Mechanics]**  
Catalog Number: 7152  
Instructor to be determined  
*Half course (spring term). Hours to be arranged.*  
*Prerequisite:* Engineering Sciences 240 or equivalent.

**Engineering Sciences 249. Advanced Neural Control of Movement**  
Catalog Number: 3145  
Maurice A. Smith  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
Students expected to meet all of the requirements of Engineering Sciences 149 and in addition to submit a term project with significant analytic content.  
*Note:* Offered in alternate years.  
*Prerequisite:* Mathematics 21b or Applied Mathematics 21b or equivalent, probability and statistics, Physics 11a or equivalent.

**[Engineering Sciences 250. Information Theory]**  
Catalog Number: 8606  
Patrick J. Wolfe
Half course (fall term). Tu., Th., 1–2:30.
Fundamental concepts of information theory and applications to signal processing, communications, statistics. Entropy, differential entropy, mutual information; data compression and rate distortion theory; channel capacity, coding, the Gaussian channel. Contemporary research topics as time permits.
Prerequisite: Probability theory in Engineering Sciences 150, Statistics 110, or equivalent; or permission of instructor.

Engineering Sciences 252r (formerly Engineering Sciences 252). Advanced Topics in Robotics Research
Catalog Number: 0239
Robert D. Howe
Half course (spring term). Tu., Th., 11:30–1.
A graduate seminar course on advanced topics in robotics research. Students read and present research papers and undertake a research project. Spring 2013 will focus on robot design and manipulation.
Prerequisite: Engineering Sciences 159/259 or equivalent, or permission of instructor.

Engineering Sciences 255. Statistical Inference with Engineering Applications (formerly Detection and Estimation Theory and Applications)
Catalog Number: 9816
Yue Lu
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Statistical decision theory; hypothesis testing; linear and non-linear estimation; maximum likelihood and Bayes approaches; asymptotic methods in statistics; stochastic processes and systems; signal detection and estimation in noise; Wiener and Kalman filtering; Markov chain Monte-Carlo methods; applications to physical, chemical, and biological systems. Prerequisite: Knowledge of probability theory and calculus.
Prerequisite: Knowledge of probability theory and calculus.

Engineering Sciences 259. Advanced Introduction to Robotics
Catalog Number: 3671
Robert J. Wood
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Course requirements are similar to Engineering Sciences 159, with the exception that students enrolled in Engineering Sciences 259 are required to prepare a term project analyzing current research in a specific problem area within Robotics.
Note: Offered in alternate years.
Prerequisite: Computer Science 50 and either Engineering Sciences 125 or 156.

[Engineering Sciences 263. Microbial Geochemistry]
Catalog Number: 5384
Colleen M. Hansel
Half course (spring term). Th., 2–4:30. EXAM GROUP: 16, 17, 18
This course explores advanced concepts in microbe-metal-mineral interactions. Topics include microbial metabolism, bioenergetics, biomineralization, energy generation, and pollutant
degradation, discussed within the context of Earth systems and environmental remediation.

Note: Expected to be given in 2013–14. Offered in alternate years.

Prerequisite: Knowledge of undergraduate level chemistry and microbiology required (minimum of Life Sciences 1a and Physical Sciences 1 or equivalent courses) or permission of instructor.

[Engineering Sciences 264. Advanced Aqueous and Environmental Chemistry]
Catalog Number: 1726
Colleen M. Hansel
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
Content and requirements are similar to ES 164, with the exception that students enrolled in ES 264 are assigned more demanding problem sets and are required to prepare a term project or presentation in applied environmental chemistry.

Note: Cannot be taken for credit by students who have already taken ENG-SCI 164.

Prerequisite: Physical Sciences 1 or permission of the instructors.

[Engineering Sciences 265. Advanced Water Treatment]
Catalog Number: 20731
Chad D. Vecitis
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Advanced Water Treatment will give students detailed instruction in emerging technologies for municipal wastewater treatment, industrial wastewater treatment, wastewater reclamation and reuse, desalination, and groundwater remediation. The course will begin by introducing wastewater quality, effluent water quality endpoints, and conventional treatment methodologies. The theoretical focus of the course will be on the fundamental biology, chemistry, and physics of processes including nanofiltration, reverse osmosis, membrane bioreactors, denitrification and phosphate removal, ozonolysis, UV photolysis, photocatalysis, and sonolysis. We will also discuss wastewater-to-energy processes including microbial fuel cells, anaerobic digestion, and electrochemical waste-to-hydrogen.

Note: Expected to be given in 2013–14. Offered in alternate years.

Prerequisite: Engineering Sciences 165

Engineering Sciences 267. Aerosol Science and Technology
Catalog Number: 4446
Scot T. Martin
Half course (fall term). Tu., Th., 11:30–1.
Physics and chemistry of aerosol particles. Concepts: size, shape, and density; number size distributions; uniform, accelerated, and Brownian motion; electrical properties; measurement instrumentation; condensation/evaporation; coagulation; and optical properties. Taught by reference to topical problems.

Note: Offered in alternate years.

[Engineering Sciences 268. Chemical Kinetics]
Catalog Number: 8711
Scot T. Martin
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Time rate of change of chemical species. Rate constants. Formulating a coupled chemical
system. Numerical analysis of complex systems.

Note: Offered in alternate years.

**Engineering Sciences 269. Environmental Nanotechnology**

Catalog Number: 57068

Chad D. Vecitis

Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8

Introduces students to the environmental aspects of nanoscience and nanotechnology. We will study the fundamental physical chemical properties, characterization, environmental implications, and environmental applications of nanoparticles and nanomaterials. Case studies from recent publications on engineered carbon nanomaterials such as fullerenes, carbon nanotubes, and graphene will be discussed.

Prerequisite: College-level chemistry course or equivalent and Physical Sciences 1 or equivalent.

**Engineering Sciences 271r. Topics in Mixed-Signal Integrated Circuits**

Catalog Number: 1158

Gu-yeon Wei and David M. Brooks

Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4

A seminar course that reviews research and development of various topics in integrated circuits and systems for low-power and/or high-performance computing.

Prerequisite: Computer Science 148 or equivalent, and Computer Science 146 or equivalent, or with permission of instructor.

**Engineering Sciences 272. RF and High-Speed Integrated Circuits**

Catalog Number: 5157

Donhee Ham

Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13

Design of RF and high speed integrated communication circuits at both transistor and system levels.

Note: Expected to be given in 2013–14.

Prerequisite: Solid-state devices and analog circuits (Engineering Sciences 154 or equivalent), basic electromagnetism (Physics 11b or 15b or some part of Engineering Sciences 151 or equivalent), basic differential equations (Applied Mathematics 21b or equivalent), and Fourier analysis (some part of Applied Mathematics 105a or Engineering Sciences 156 or equivalent).

**Engineering Sciences 273. Optics and Photonics**

Catalog Number: 8382

Marko Loncar

Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8

Topics include: review of electromagnetism, negative index materials, optical beams and free-space optics, guided wave optics (including optical fiber), optical resonators, perturbation and couple mode theory, transfer matrix methods, periodic optical structures, plasmons, nonlinear optics.

Note: Expected to be given in 2013–14. Open to graduate students and advanced undergraduates.
[Engineering Sciences 274. Quantum Technology I]
Catalog Number: 5645
Federico Capasso
Half course (spring term). W., F., 1–2:30. EXAM GROUP: 6, 7
Covers concepts of device physics, including semiconductors, photonic devices, related quantum concepts. Semiconductor heterostructures: band structure engineering. Quantum wells, superlattices; resonant tunneling; Stark effect. Diode lasers; quantum well lasers, modulators and detectors; quantum cascade lasers.
Note: Expected to be given in 2013–14.
Prerequisite: Undergraduate level quantum mechanics such as Physics 143a or equivalent.

[Engineering Sciences 275. Nanophotonics]
Catalog Number: 9815
Kenneth B. Crozier
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Note: Expected to be given in 2013–14. Open to graduate students and advanced undergraduates.
Prerequisite: Electromagnetism (Physics 11b or 15b or Engineering Sciences 151 or equivalent).

*Engineering Sciences 276. Introduction to MicroElectroMechanical System
Catalog Number: 54441 Enrollment: Limited to 25.
Fawwaz Habbal and Anas Chalah
Half course (fall term). Tu., 5:30–7:30 p.m. EXAM GROUP: 18
This course introduces student to the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS). It teaches fundamentals of micro machining and Micro fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques, and surface, bulk, and electroplating micro machining technologies.
Prerequisite: Physics 11a,b or 15a,b; College Chemistry at the level of Life Sciences 1a and Physical Sciences 1.

Engineering Sciences 277. Microfabrication Laboratory - (New Course)
Catalog Number: 48852
Kenneth B. Crozier
Half course (spring term). M., at 10, and weekly 3-hour laboratory. EXAM GROUP: 3
Content and requirements are similar to ENG-SCI 177, with the exception that students enrolled in ENG-SCI 277 are assigned more demanding problem sets and are required to prepare a term project.
Prerequisite: Physics 11a and Physics 11b; or Physics 15a and 15b or equivalent.

Engineering Sciences 298r. Quantum Electronics and Photonics
Catalog Number: 28719
Amirhamed Majedi
This course is designed for engineers who are interested to learn applied quantum mechanics to study quantum behavior of electron, photon and their interaction. The course content is a mix of topics usually covered in more conventional courses such as quantum electronics and quantum optics to invite a wide range of audiences who are working on areas such as optoelectronics, quantum photonics, nanoelectronics, nanophotonics, spintronics, and in general quantum devices and systems. The course emphasizes on the fundamental concepts and engineering applications without a need for previous exposure to quantum mechanics. Examples and problems are designed to address the applications of the course contents to real problems.

Note: Cannot be taken for credit by students who have taken ENG-SCI 298 in Spring 2012.

**Engineering Sciences 299r, Special Topics in Engineering Sciences**
Catalog Number: 6710
Gu-yeon Wei

Half course (fall term; repeated spring term). Hours to be arranged.
Supervision of experimental or theoretical research on acceptable engineering and applied science problems and supervision of reading on topics not covered by regular courses of instruction.

Note: Open to graduate students and AB/SM candidates only. Students must arrange such work with a member of the School of Engineering and Applied Sciences. This course is graded and is ordinarily taken with the approval of the Committee on Higher Degrees. Applicants must file a project sheet before study cards are filed. Project sheets may be obtained from the Student Affairs Office, Pierce Hall 110.

**Cross-listed Courses**

Earth and Planetary Sciences 231. Climate Dynamics
[Systems Biology 205. Synthetic Biology]

Additional courses of interest to graduate students in Environmental Science and Engineering might include courses offered at the Harvard School of Public Health.

**Graduate Courses of Reading and Research**

Reading courses are odd-numbered; research courses are even-numbered.

*Engineering Sciences 301,302. Nanophotonics*
Catalog Number: 7403,4838
Kenneth B. Crozier 5146

*Engineering Sciences 303,304. Topics in Electronic Materials and Semiconductor Heterostructure Physics*
Catalog Number: 8668,2824
Venkatesh Narayanamurti 5445 (on leave 2012-13)
*Engineering Sciences 307,308. Control Theory, Robotics, Computer Vision, and Intelligent Machines
Catalog Number: 7566,2719
Roger W. Brockett 3001

*Engineering Sciences 309,310. Design, Sensing, and Control
Catalog Number: 5043,7419
Robert D. Howe 2789

*Engineering Sciences 311,312. Systems and Control, Quantum Information and Quantum Control, Computational Vision, Image Analysis and Understanding
Catalog Number: 2025,9377
Navin Khaneja 4192

*Engineering Sciences 313,314. Image Processing and Computer Vision
Catalog Number: 4254,8534
Todd Zickler 5143

*Engineering Sciences 315,316. Wireless Computing and Networking
Catalog Number: 2848,2849
H. T. Kung 3155

*Engineering Sciences 319,320. Microrobotics and Bio-inspired Autonomous Robotic Systems
Catalog Number: 5306,5314
Robert J. Wood 5339

*Engineering Sciences 321,322. Heterogeneous Nanophotonic Devices and Bio-templated Electronic Materials
Catalog Number: 85105,33583
Evelyn Hu 6682

*Engineering Sciences 323,324. Materials Processing
Catalog Number: 1174,5484
Jennifer Lewis 7229

*Engineering Sciences 325,326. Mixed-Signal VLSI Design
Catalog Number: 8415,9336
Gu-yeon Wei 4102

*Engineering Sciences 327,328. Circuit Design and Scientific Instrumentation
Catalog Number: 4901,6521
Paul Horowitz 3537
*Engineering Sciences 329,330. Biological Signal Analysis and Tomography
Catalog Number: 4111,7427
Vahid Tarokh 4368

*Engineering Sciences 331,332. RF/Microwave/Analog/Mixed-Signal Integrated Circuits and Ultrafast Electronics
Catalog Number: 9645,9655
Donhee Ham 4519

Catalog Number: 6528,5449
Zhigang Suo 4761

Catalog Number: 8173,2399
Joost J. Vlassak 3184

Catalog Number: 4316,3948
James R. Rice 7270 (on leave fall term)

*Engineering Sciences 339,340. Materials Physics and Engineering
Catalog Number: 39784,54891
David R. Clarke 6684

Catalog Number: 39227,54334
Katia Bertoldi 6440

*Engineering Sciences 343,344. Deformation and Fracture of Materials
Catalog Number: 3907,2803
John W. Hutchinson 1573

*Engineering Sciences 345,346. Neural Control of Movement
Catalog Number: 6002,6007
Maurice A. Smith 5342

*Engineering Sciences 347,348. Biomolecular Engineering, Molecular Self-Assembly and Responsive Materials - (New Course)
Catalog Number: 84569,90749
Neel S. Joshi 6595

*Engineering Sciences 349,350. Materials Science
Catalog Number: 90856,39334
Roy G. Gordon 1353
*Engineering Sciences 351,352. Engineering Mammalian Cell Phenotype
Catalog Number: 4879,6421
David J. Mooney 4879

*Engineering Sciences 353,354. Cellular Biophysics
Catalog Number: 3813,3798
Kevin K. Parker 4788 (on leave fall term)

*Engineering Sciences 355,356. Bioinspired Engineering - (New Course)
Catalog Number: 94599,47624
Donald E. Ingber 2832

*Engineering Sciences 357,358. Atmosphere-Biosphere Interactions
Catalog Number: 7661,8060
Steven C. Wofsy 4396

*Engineering Sciences 359,360. Stratospheric Chemistry and Transport
Catalog Number: 8410,6856
Steven C. Wofsy 4396

*Engineering Sciences 361,362. Atmospheric Chemistry
Catalog Number: 7238,7514
Daniel J. Jacob 1781

*Engineering Sciences 363,364. Dynamic Meterology
Catalog Number: 3756,3757
Brian F. Farrell 7628

*Engineering Sciences 365,366. Topics in Atmospheric and Climate Dynamics
Catalog Number: 3233,3236
Zhiming Kuang 5285

*Engineering Sciences 367,368. Environmental Science
Catalog Number: 6773,9810
Michael B. McElroy 2462

*Engineering Sciences 369,370. Urban and Regional Systems Analysis
Catalog Number: 8775,8768
Peter P. Rogers 2804

*Engineering Sciences 371,372. Environmental Microbiology
Catalog Number: 6258,3885
Colleen M. Hansel 5609
*Engineering Sciences 373,374. Water Management  
Catalog Number: 63797,12275  
*John Briscoe 6683

*Engineering Sciences 375,376. Environmental Biology  
Catalog Number: 3985,2863  
*Ralph Mitchell 1587

*Engineering Sciences 377,378. Transport Phenomena and Biomaterials for Drug Delivery  
Catalog Number: 6385,8671  
*David A. Edwards 3919 (on leave fall term)

*Engineering Sciences 379,380. Biologically Inspired Design and Control of Medical Devices and Robots  
Catalog Number: 2354,0313  
*Conor J. Walsh 6860

*Engineering Sciences 381,382. Environmental Nanotechnology  
Catalog Number: 69441,17919  
*Chad D. Vecitis 6609

*Engineering Sciences 389,390. Environmental Chemistry  
Catalog Number: 6660,1639  
*Scot T. Martin 3365

*Engineering Sciences 393,394. Microelectronics and VLSI Systems  
Catalog Number: 6037,6056  
*Woodward Yang 2790 (on leave 2012-13)

*Engineering Sciences 395,396. Nanoscale Optics, NEMS and Nanofabrication Technology  
Catalog Number: 2564,3687  
*Marko Loncar 5703

Catalog Number: 78552,93659  
*Yue Lu 6750

Cross-listed Courses

*Computer Science 365. SEAS Teaching Practicum
English

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of English

James Simpson, Donald P. and Katherine B. Loker Professor of English, Harvard College Professor (Chair)
Elizabeth Duffy Adams, Visiting Lecturer on English
Daniel Albright, Ernest Bernbaum Professor of Literature (on leave 2012-13)
David J. Alworth, Assistant Professor of English and of History and Literature
David John Babcock, Lecturer on English
Joshua David Bell, Briggs-Copeland Lecturer on English
Homi K. Bhabha, Anne F. Rothenberg Professor of the Humanities
Stephen Louis Burt, Professor of English (Director of Undergraduate Studies)
Glenda R. Carpio, Professor of English and of African and African American Studies
Amanda Claybaugh, Professor of English
Daniel G. Donoghue, John P. Marquand Professor of English
James Engell, Gurney Professor of English Literature and Professor of Comparative Literature
Philip J. Fisher, Felice Crowl Reid Professor of English (on leave spring term)
Darcy Frey, Briggs Copeland Lecturer on English
Marjorie Garber, William R. Kenan, Jr. Professor of English and of Visual and Environmental Studies
Henry Louis Gates, Jr., Alphonse Fletcher, Jr. University Professor
Jorie Graham, Boylston Professor of Rhetoric and Oratory (on leave fall term)
Stephen J. Greenblatt, Cogan University Professor (on leave 2012-13)
Katherine Bennett Gustafson, College Fellow in the Department of English
Amy Hempel, Senior Lecturer on English
Bret A. Johnston, Senior Lecturer on English
Matthew Kaiser, Associate Professor of English
Ju Yon Kim, Assistant Professor of English
Louis Menand, Anne T. and Robert M. Bass Professor of English (on leave fall term)
Elisa New, Powell M. Cabot Professor of American Literature
Diane Paulus, Professor of the Practice of Theatre and Artistic Director of the American Repertory Theater
Leah Price, Professor of English, Harvard College Professor
Martin Puchner, Byron and Anita Wien Professor of Drama and of English and Comparative Literature (Director of Graduate Studies)
Steven Peter Rozenski, College Fellow in the Department of English
Daniel J. Rubin, Briggs-Copeland Lecturer on English
Peter Sacks, John P. Marquand Professor of English (on leave fall term)
Robert Scanlan, Professor of the Practice of Theatre (on leave fall term)
Elaine Scarry, Walter M. Cabot Professor of Aesthetics and the General Theory of Value,
Harvard College Professor
Marc Shell, Irving Babbitt Professor of Comparative Literature and Professor of English
Werner Sollors, Henry B. and Anne M. Cabot Professor of English Literature and Professor of
African and African American Studies (on leave spring term)
John Stauffer, Professor of English and of African and African American Studies
Gordon Teskey, Professor of English
Helen Vendler, Arthur Kingsley Porter University Professor
Andrew Warren, Assistant Professor of English (on leave 2012-13)
Nicholas Watson, Professor of English (on leave 2012-13)
Leah Jane Whittington, Assistant Professor of English
James Wood, Professor of the Practice of Literary Criticism

*Other Faculty Offering Instruction in the Department of English*

Lawrence Buell, Powell M. Cabot Professor of American Literature, Emeritus
Leo Damrosch, Ernest Bernbaum Professor of Literature, Emeritus
Joseph C. Harris, Francis Lee Higginson Professor of English Literature and Professor of
Folklore, Emeritus
Robert J. Kiely, Donald P. and Katherine B. Loker Professor of English, Emeritus
Barbara K. Lewalski, William R. Kenan, Jr. Professor of History and Literature and of English, Emerita

Department of English Common Ground Courses are required of concentrators, and are
ordinarily not an entry point to the study of English at Harvard for non-concentrators. Students
are invited, however, to begin with any course that seems suited to their interests and level of
preparation: a Freshman Seminar taught by faculty members from the English Department or a
100-level course, all of which are taught in lecture or discussion format according to enrollment
size; or, space permitting and with instructor consent, a 90-level Undergraduate Seminar or a
Creative Writing Workshop.

**I. Creative Writing**

*Primarily for Undergraduates*

Without approval of the department, no student may take more than one full course (two half
courses) in Creative Writing in any one year. A Creative Writing course may be repeated for
credit provided the student has the permission of the instructor and the Director of
Undergraduate Studies of the Department.

*English Calr. Dramatic Screenwriting II: Workshop*
Daniel J. Rubin

*English Camr. Intermediate Playwriting: Workshop*

Catalog Number: 2555 Enrollment: Limited to 12.
Liz Duffy Adams

Half course (fall term). Tu., 1–4.
This course is for students who have already completed a one-act play, and assumes a basic working knowledge of theatrical writing. The workshop reviews and builds on those basics to explore the art and craft of playwriting, taking into account both the aesthetic heights and practical aspects of this "lively art." It combines intensive weekly writing and discussion of student work with reading and discussing plays and essays. Each student will complete a full-length play.

Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*Liz Duffy Adams

*English Canr. Advanced Playwriting: Production Workshop - (New Course)*

Catalog Number: 70584 Enrollment: Limited to 12.
Liz Duffy Adams

This workshop course is for writers with prior experience in dramatic writing. In the first half of the term, we will read and discuss plays and other theatrical texts, and develop work through in-class exercises and other assignments. As the semester progresses, the focus will be on the development of students’ work-in-progress. Plays written in this course will be eligible to be included as staged readings in the spring Harvard Playwrights’ Festival.

Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*Jorie Graham

*English Capr. Poetry: Workshop*

Catalog Number: 6523 Enrollment: Limited to 12.

Open by application to both undergraduates and graduates. Please submit a portfolio including a letter of interest, ten poems, and a list of classes (taken at Harvard or elsewhere) that seem to have bearing on your enterprise. Class lasts 3 hours and includes the study of poetic practice in conjunction with the discussion of student work.
2012-2013 Previous Courses of Instruction

Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Cbbr. Intermediate Poetry: Workshop*
Catalog Number: 59646 Enrollment: Limited to 12.
Joshua Bell
Half course (fall term; repeated spring term). Tu., 4–7 p.m.
Initially, students can expect to read, discuss, and imitate the strategies of a wide range of poets writing in English; to investigate and reproduce prescribed forms and poetic structures; and to engage in writing exercises meant to expand the conception of what a poem is and can be. As the course progresses, reading assignments will be tailored on an individual basis, and an increasing amount of time will be spent in discussion of student work.
Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Chcr. Advanced Poetry: Workshop*
Catalog Number: 53445 Enrollment: Limited to 12.
Joshua Bell
Half course (fall term; repeated spring term). M., 4–7 p.m. EXAM GROUP: 9
By guided reading, classroom discussion, one on one conference, and formal and structural experimentation, members of the Advanced Poetry Workshop will look to hone, deepen, and challenge the development of their poetic inquiry and aesthetic. Students will be required to write and submit one new poem each week and to perform in-depth, weekly critiques of their colleagues’ work.
Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Ckr. Introduction to Playwriting: Workshop*
Catalog Number: 6781 Enrollment: Limited to 12.
Liz Duffy Adams
Half course (fall term; repeated spring term). M., 1–4.
This workshop introduces students to the essential concepts and tools of theatrical writing, and to a range of dramatic aesthetics from the classical Well Made Play to post-modern poetic theater. It combines intensive weekly writing and discussion of student work with reading and discussing plays, from classical to contemporary, and essays by theater-makers. Each student will complete a one-act play and several shorter pieces.
Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Clr. Dramatic Screenwriting I: Workshop*
Catalog Number: 6121 Enrollment: Limited to 12.
Daniel J. Rubin
Half course (fall term; repeated spring term). Fall: M., 4–7 p.m.; or, Tu., 4–7 p.m.; Spring: Tu., 4–7 p.m. EXAM GROUP: Fall: 9; Spring: 18
This workshop introduces the art, craft, and business of screenwriting. Students will complete short scripts and off-beat writing exercises focused on dramatic structure, character development,
dialogue, theme, and tone; students will also analyze films and screenplays. By exploring visual storytelling, personal versus commercial sensibilities, and alternative approaches to script creation through the writing of short screenplays, students will acquire the tools, skills, and confidence to create feature film scripts.  

*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

**English Cnfr. Introduction to Creative Nonfiction: Workshop**  
Catalog Number: 6740 Enrollment: Limited to 12.  
Darcy Frey  
*Half course (fall term; repeated spring term). W., 4–7 p.m. EXAM GROUP: Fall: 9*  
Whether in essay, memoir or reportage, creative nonfiction employs many of the same literary techniques as fiction: narrative structure, character development, scene-setting, extended dialogue, emphasis on voice and point of view. In addition to workshopping student writing, we discuss examples of the genre by writers such as Virginia Woolf, William Maxwell, Joan Didion, and John McPhee. Assignments include two 10-15 page narratives, an extensive revision, and typed critiques of classmates’ work.  

*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

**English Cnnr. Advanced Creative Nonfiction: Workshop**  
Catalog Number: 2121 Enrollment: Limited to 12.  
Darcy Frey  
*Half course (fall term; repeated spring term). Th., 4–7 p.m. EXAM GROUP: 18*  
In any long-form nonfiction (essay, memoir, travelogue, journalism), there are countless ways of structuring and telling a true story. In this workshop, students examine various techniques for giving nonfiction material dramatic and suspenseful energy: chronology, argument, juxtaposition, retrospection, evolving revelation. In addition to workshopping student writing, we discuss examples of the genre by writers such as Julia Blackburn, Truman Capote, Spalding Gray, and Janet Malcolm. Assignments include two 10-15 page narratives, an extensive revision, and typed critiques of classmates’ work.  

*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

**English Cpwr. Poetry: Workshop**  
Catalog Number: 4606 Enrollment: Limited to 12.  
Jorie Graham  
*Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17*  
Open by application to both undergraduates and graduates. Please submit a portfolio including five poems, a letter explaining your interest in the class, and a list of relevant classes taken at Harvard or elsewhere. Class includes the discussion of literary texts as well as work written by students.  

*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.
*English Crr. Fiction Writing: Workshop*
Catalog Number: 1893 Enrollment: Limited to 12.
Bret A. Johnston
Half course (fall term; repeated spring term). W., 4–7 p.m. EXAM GROUP: 9
An introduction to fundamental aspects (technical and conceptual) of writing fiction, beginning with short exercises and moving toward the completion and revision of original work. Readings include Munro, Welty, Diaz, Lahiri, and others, and explore how practicing writers negotiate character, narrative structure, setting, voice, etc. Individual reading assignments are also devised on a per project basis. As the term continues, increasing amounts of time are devoted to the discussion of student work.
*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Ctr. Advanced Fiction Writing: Workshop*
Catalog Number: 7175 Enrollment: Limited to 12.
Bret A. Johnston
Half course (fall term; repeated spring term). Th., 4–7 p.m. EXAM GROUP: 18
Writers will become familiar with more sophisticated aspects (technical and conceptual) of writing fiction, beginning with short exercises and moving toward the completion and revision of original work. Readings include Munro, Welty, Diaz, Lahiri, and others, and we will explore how practicing writers negotiate character, narrative structure, setting, voice, etc. Individual reading assignments are also devised on a per project basis. As the term continues, increasing amounts of time are devoted to the discussion of student work. Students in this course will be expected to revise work often and to a very high standard.
*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Cwar. Advanced Fiction: Workshop*
Catalog Number: 88347 Enrollment: Limited to 12.
Amy Hempel
Half course (fall term; repeated spring term). Fall: Th., 4–7 p.m.; Spring: Th., 1–4. EXAM GROUP: Fall: 18
Members of the advanced fiction workshop will aim to raise their levels of performance on the page, largely through guided revisions and continued reading to see the ways outstanding writers solved similar problems. Two complete stories with revisions are required during the term, as well as weekly critiques of colleagues’ work.
*Note:* Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

*English Cwfr. Introductory Fiction: Workshop*
Catalog Number: 21718 Enrollment: Limited to 12.
Amy Hempel
Half course (fall term; repeated spring term). W., 4–7 p.m. EXAM GROUP: Fall: 9
An introduction to the short story with emphasis on amplifying the idea of what a story can be. We will look at a range of contemporary narrative strategies that exploit--in the best sense of the word--voice, character, place, logic, and (always) language. Readings will include Barry
Hannah, Tillie Olsen, Leonard Michaels, Mark Richard, Mary Robison, Yasunari Kawabata, and selected poets. Short assignments will aim to strengthen writing at the sentence level, and suggest personal ways into the largest concerns. Students should expect to complete and revise two stories, and be prepared to discuss the work of colleagues each week. 

Note: Admission based on submitted samples of writing. For information on specific application requirements, please see the English Department’s Creative Writing web page.

II. Literature

Primarily for Undergraduates

Common Ground Courses (two hours of lecture, one hour of discussion section weekly). Preference is given to English concentrators.

*English 40. Arrivals
Catalog Number: 62547 Enrollment: Limited to 27.
Daniel G. Donoghue
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
An introduction to major works in English literature from Beowulf through the seventeenth century, the course will explore various ways that new literatures are created in response to cultural forces that shape poets, genres, and group identity. We will hone close reading skills, introduce rhetorical tropes, and develop techniques of critical writing.

*English 41. Arrivals
Catalog Number: 74158 Enrollment: Limited to 27.
James Simpson
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12
Across the period 700-1700 the shapes of British culture were absorbed from different centers of Western Europe. These cultural forms are conflicted among themselves, and conflicted across time. This course will delineate the principal cultural forces (e.g. religious, political, social) that shaped England in particular. We will look to the ways in which those vibrant yet opposed forces find expression in the shape, or form, of literary works.

*English 43. Arrivals: from Beowulf to Milton - (New Course)
Catalog Number: 46007 Enrollment: Limited to 27.
Steven Peter Rozenski
Half course (fall term). M., W., at 12:. EXAM GROUP: 5
From 43 to 1066 A.D., Britain was invaded time and again: Romans, Anglo-Saxons, Vikings, and Normans all brought cultural and linguistic change to the indigenous Celts and Picts. Through this lens of cultural importation, we will study the literature of England from its earliest recorded instances (around 650 A.D.) to the seventeenth century (by which time English was becoming a global language), reading the greatest works in the language along the way.

*English 52. Poets: Personal and Impersonal Lyric: Shakespeare, Herbert, Blake, Keats - (New Course)
Catalog Number: 54851 Enrollment: Limited to 27. This course does not fulfill the Shakespeare
2012-2013 Previous Courses of Instruction

requirement.

Helen Vendler

*Half course (fall term). W., 1–3; . EXAM GROUP: 6, 7
A study of several poets’ uses of the personal and impersonal lyric genres.

Catalog Number: 58318 Enrollment: Limited to 27.

Peter Sacks

*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
An introduction to the fundamentals of Lyric poetry.

*English 57 (formerly *English 90qm). Poets: Metaphysical Poetry
Catalog Number: 4727 Enrollment: Limited to 27.

Gordon Teskey

*Half course (spring term). M., W., at 1. EXAM GROUP: 6
A course on the major lyric poets of the 17th century, Donne, Jonson, Herbert, and Marvell. What is the relation between poetry and philosophy, between lyric expression and permanent order? In the seventeenth century, medieval notions of order gave way before the rise of science and of early modern philosophy.

*English 60. Diffusions: Fictions of America
Catalog Number: 65252 Enrollment: Limited to 27.

Elisa New

*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course will treat America as it was imagined and re-imagined between the 16th-21st centuries by successive waves of Europeans, Africans and their descendants. The course explores how evolving fictions of America’s purpose, changing notions of America’s geography and conflicting ideas of American character inform an emerging literary tradition. Readings list likely to include non-fiction by Harriot, Rowlandson, Mather, Franklin, Jacobs; shorter fiction by Irving, Hawthorne, Melville and Stein; novels by Cather, Norris and Morrison.

*English 61. Diffusions: Not on Native Grounds
Catalog Number: 22636 Enrollment: Limited to 27.

Werner Sollors

*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Readings in works by American authors that are set outside the United States. Crossing boundaries, culture shock, expatriate and exotic dreams and nightmares, distant mirrors and revelations about "home," linguistic and class disorientation, glimpses of cosmopolitanism, and other topics. Note: Course meets for a third hour on Thursdays in sections led by Werner Sollors and Giovanna Micconi.

*English 62. Diffusions: Castaways and Renegades
Catalog Number: 37743 Enrollment: Limited to 27.

John Stauffer

*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
This course traces the extraordinary rise of American literature from the nation’s founding through the early twentieth century. Focusing on the "outsider," we examine how American literature gave definition to a culture that was distinct from Europe. Along the way we explore a number of themes: the dilemma of democratic ideals co-existing with slavery and oppression; women as symbols of America; and the relationship between domestic and national fictions. Authors include Irving, Douglass, Melville, Stowe, Whitman, James, Twain, Chesnutt, Wharton, others.

*English 64. Diffusions: American Renaissance and Irish Revival - (New Course)*
Catalog Number: 69958 Enrollment: Limited to 27.
Amanda Claybaugh
Half course (spring term). M., W., at 11; sections TBA. EXAM GROUP: 4
Case studies in the formation of national literatures. In the 1850s, a new generation of American authors suddenly came into its own (Dickinson, Emerson, Hawthorne, Melville, Thoreau, Whitman); in the early 1900s, something similar happened in Ireland (Joyce, O’Casey, Synge, Yeats). In both cases, a national literature emerged in rebellion against the literature of Britain, and, in both cases, the literature that emerged would go on to inspire other post-colonial literatures around the world.

*Undergraduate Seminars*

These introductions to the specialized study of literature are restricted to undergraduates and have enrollments limited to 15. Preference is given to English concentrators.

*English 90ac. Cut Tongue Theaters: Asian American and Chicana/o Playwrights: Seminar - (New Course)*
Catalog Number: 84274 Enrollment: Limited to 15.
Ju Yon Kim
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This course will examine the works of major Asian American and Chicana/o playwrights. Authors may include Luis Alfaro, Julia Cho, Rajiv Joseph, Cherrie Moraga, Luis Valdez, and Chay Yew.

*English 90ad. American Detective Fiction: Seminar - (New Course)*
Catalog Number: 17645 Enrollment: Limited to 15.
David J. Alworth
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
This course has three goals: to develop an understanding of detective fiction by closely examining its trademark features (e.g. the private eye, the downbeat mood); to explore the relationship between reading and investigating by considering how stories turn us into literary detectives; and to consider how detective fiction registers and responds to its cultural and political context. Likely authors: Dashiell Hammett, Raymond Chandler, Patricia Highsmith, James M. Cain, and Chester Himes.

*English 90dd. Dickens: The Early Years: Seminar*
Catalog Number: 94733 Enrollment: Limited to 15.
Matthew Kaiser  
*Half course (spring term). M., 11–1.*

Dickens published his first literary sketch at the age of 21. By 24, he was famous. Focusing on the first decade of his career, we will examine the journalism, novels, and American travel writings of this preeminent Victorian author.

*English 90dw. David Foster Wallace and his Generation: Seminar - (New Course)*  
Catalog Number: 38035 Enrollment: Limited to 15.  
Adam Maxwell Kelly  
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*  
David Foster Wallace is often described as the voice of his generation, and in this course we will assess the claim by placing Wallace’s major fiction in its generational context. Beginning with an in-depth reading of *Infinite Jest*, and ending with *The Pale King*, the middle weeks of the seminar will explore connections between Wallace’s distinctive aesthetics and the fiction of his peers, including Junot Diaz, Jennifer Egan, Jeffrey Eugenides, Dana Spiotta, and Colson Whitehead.

*English 90el. English Literature in the 16th Century: Seminar - (New Course)*  
Catalog Number: 14149 Enrollment: Limited to 15.  
Leah Jane Whittington  
*Half course (fall term). M., 2–4. EXAM GROUP: 7, 8*  
This course will study the literature of the English Renaissance in relationship to the cultural and intellectual movements of 16th century Europe. It aims to offer a survey of the major texts, authors, and genres of this dynamic period and to focus on the literary, intellectual, religious, and cultural contexts which they imitate and transform, including Petrarchan love lyric, Renaissance humanism, Protestant religious reform, and the discovery of the New World.

*English 90eo. Emancipation I: Seminar - (New Course)*  
Catalog Number: 65671 Enrollment: Limited to 15.  
John Stauffer  
*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*  
A seminar on Boston and Emancipation, including but not limited to the Transcendentalists and black leaders, that will culminate with an exhibition at Houghton Library, curated by the students.

*English 90et. Emancipation II: Seminar - (New Course)*  
Catalog Number: 62966 Enrollment: Limited to 15.  
John Stauffer  
*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*  
A seminar on Boston and Emancipation, including but not limited to the Transcendentalists and black leaders, that will culminate with an exhibition at Houghton Library, curated by the students.

*English 90ga. Gender, Age, and 18th Century Literature: Seminar - (New Course)*  
Catalog Number: 27098 Enrollment: Limited to 15.  
Katherine Bennett Gustafson
2012-2013 Previous Courses of Instruction

Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
This course will study diverse texts, analyzing the ways that they reflected and influenced evolving conceptions of the life cycle. Profound changes took place in eighteenth-century society’s approach to aging, from the invention of children’s literature to the theorization of pubescence. Reading novels, plays, poetry, children’s literature, and educational theory, we will explore literary representations of age in relation to generic developments. Authors may include Locke, Rousseau, Swift, Defoe, Richardson, Newbery, Burney, and Edgeworth.

*English 90hb. Four Shakespeare Plays: Seminar
Catalog Number: 59051 Enrollment: Limited to 15.
Marc Shell

Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This is a survey course of Shakespeare plays.
Note: This course, when taken for letter grade, meets the Department of English Shakespeare requirement.

*English 90hj. Henry James: Seminar - (New Course)
Catalog Number: 35457 Enrollment: Limited to 15.
Elisa New

Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
This course surveys Henry James’s career from the 1860s through his death. Readings will include short fiction and novels from all three major periods (novels to include Washington Square, The Portrait of a Lady, The Bostonians, The Spoils of Poynton, The Turn of the Screw, The Ambassadors, The Golden Bowl ) as well as selected journalism, theoretical essays, prefaces and letters. Some attention will also be given to the James family, especially William James, and to trends in transatlantic literary culture.

*English 90hs. Satire: Augustan and Modern: Seminar
Catalog Number: 8795 Enrollment: Limited to 15.
Michael Shinagel

Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
A study of satire in poetry, prose fiction, and drama. Authors covered are Blake, Swift, Pope, Johnson, Gay, Voltaire, Orwell, Brecht, Vonnegut, and West.

*English 90ht. How to Read a Book: Seminar - (New Course)
Catalog Number: 50564 Enrollment: Limited to 15.
Leah Price

Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Historical and literary narratives of reading; texts by Cervantes, Richardson, Franklin, Sterne, Flaubert, Ellison, and Bradbury, together with research exercises in Harvard library and museum collections.

*English 90jk. The Poetry of John Keats: Seminar - (New Course)
Catalog Number: 47859 Enrollment: Limited to 15.
Helen Vendler

Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
A study of most of the poetry, focusing on influences, genre-changes, poetics, and the Keatsian lexicon.

*English 90k. Rudyard Kipling: Seminar - (New Course)*
Catalog Number: 71872 Enrollment: Limited to 15.
Matthew Kaiser
*Half course (fall term). M., 11–1.*
A seminar on the poetry, short stories, and novels of Rudyard Kipling.

*English 90kb. Poems of Seamus Heaney and Thomas Hardy: Seminar*
Catalog Number: 22333 Enrollment: Limited to 15.
Elaine Scarry
*Half course (fall term). Tu., 2–4.*
Written a century apart, the poems of Seamus Heaney and Thomas Hardy create an urgent call and response between earth and under-earth. The poets share metrical virtuosity, compressed lyric forms, the unfolding of personal history within public crisis and transformation, and the recognition that the acuity of sentience - the daily practice of exquisitely precise perceptual acts - is the ethical center of our brief stay above ground.

*English 90lv. Consciousness in Fiction: Seminar*
Catalog Number: 3200
James Wood
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*
A look at the complex ways in which writers represent their characters’ thought in texts by Austen, Flaubert, James, Tolstoy, Chekhov, Giovanni Verga, and Woolf. More broadly, traces the development of stream-of-consciousness, from Austen’s incipient mastery of free indirect style, through Flaubert’s more sophisticated use of it, to Woolf’s full-blown inner monologues, seeing this development as not merely a fact of English and American literature, but as a phenomenon of world literature and an element of our modernity.

*English 90m. Renaissance Metamorphoses: Seminar - (New Course)*
Catalog Number: 11444 Enrollment: Limited to 15.
Leah Jane Whittington
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
This course will trace the reception of Ovid’s *Metamorphoses* through the diverse responses of Marlowe, Shakespeare, Spenser, Milton and Dryden, exploring how English Renaissance writers fashioned their own poetry in response to the generative power of Ovid’s work.

*English 90me. Medieval English Drama: Seminar - (New Course)*
Catalog Number: 87159 Enrollment: Limited to 15.
Steven Peter Rozenski
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
The drama of medieval England provided entertainment and education in a variety of forms. The massive "cycle" dramas recreated the entirety of Biblical history on a number of carts which processed through the streets of cities, while morality plays such as *Everyman* provided an
intimate look at a soul’s response to the approach of death. The course will culminate in a performance of a play to be chosen in the first weeks of class.

*English 90ow. Oscar Wilde: Artist, Martyr, Celebrity: Seminar
Catalog Number: 4506 Enrollment: Limited to 15.
Matthew Kaiser
"I have nothing to declare," Wilde reputedly informed a U.S. customs agent in 1882, "except my genius." So began his famous tour of America. We will examine the plays, philosophical writings, poetry, journalism, literary criticism, and fiction of the nineteenth century’s most flamboyant and playful writer. We also explore Wilde’s life and legend, his literary influences, critics, and his rebirth in the twentieth century as a modern "gay martyr."

*English 90pe. Postcolonial Epidemics: Seminar - (New Course)
Catalog Number: 56337 Enrollment: Limited to 15.
David John Babcock
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
This seminar investigates how cultural obsessions with disease and contagion get coded within postcolonial contexts. A broad range of Anglophone fiction will provide us with a multifaceted picture that ranges from destructive social phobias to positive collective responses. These novels explore how the tragic experience of epidemics such as yellow fever, malaria, and AIDS might lead communities to better understand themselves. Authors include John Edgar Wideman, Mary Okurut, Amitav Ghosh, Kazuo Ishiguro, and Jamaica Kincaid.

*English 90pp. Puritans and Planters: Seminar - (New Course)
Catalog Number: 32752 Enrollment: Limited to 15.
Elisa New
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Surveying the literature of the Chesapeake--including texts of contact and exploration, of the Revolution, nation building, and the early Republic --and the literature of early New England--including sermonic literature, history, devotional and homiletic verse. This course introduces students to the earliest American literature in its transatlantic context.

*English 90qp. 20th-Century American Poetry: Seminar
Catalog Number: 6694 Enrollment: Limited to 15.
Peter Sacks
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This course attends to the work of several American poets whose careers span much of the second half of the 20th century. Poets include Elizabeth Bishop, James Wright, Randall Jarrell, Adrienne Rich, A. R. Ammons, Frank O’Hara, John Ashbery, and others.

*English 90sb. Samuel Beckett’s Plays and Prose: Seminar
Catalog Number: 3487 Enrollment: Limited to 15.
Robert Scanlan
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Studies systematically the arc of Samuel Beckett’s literary career, with particular emphasis on
Beckett’s stage and video plays. The course proposes the idea of a “stable habitation for the Self” as one way of understanding both Beckett’s thematic matièr and his astonishing aesthetic innovations in three media: stage, page, and video screen. Video resources supplement reading and discussion of texts, and local productions of the plays are studied when available.

*English 90sv. Sexing Victorian Fiction: Seminar - (New Course)*
Catalog Number: 99381 Enrollment: Limited to 15.
Leah Price
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9
Sex and money, reading and shopping, work and marriage, domestic realism and imperial fantasy, unsexed women and unmanned men, feminism and anti-feminism, single-sex communities and same-sex desire. Short stories and long novels by Austen, Brontë, Gaskell, Dickens, Collins, Eliot, Oliphant, and Conan Doyle, as well as essays by Ruskin, Mill, Trollope, and others.

*English 90th. The Harlem Renaissance and the Jazz Age: Seminar - (New Course)*
Catalog Number: 41658 Enrollment: Limited to 15.
Glenda R. Carpio
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
A survey of the decade of artistic production known as the "Harlem Renaissance" or the "New Negro Renaissance," or alternatively as the "Jazz Age" -- from roughly 1919 to 1929 -- that explores the controversies of racial representation and identification in the context of American national literature. We will address key interactions on the subject between and among black and white artists of the period, treating their fiction, poetry, and essays.

*English 90tv. Adventures with Robert Louis Stevenson: Seminar*
Catalog Number: 71453 Enrollment: Limited to 15.
Matthew Kaiser
The author of *Treasure Island*, *Kidnapped*, and *Dr. Jekyll and Mr. Hyde*, Scottish novelist Robert Louis Stevenson was a prolific poet, essayist, travel writer, and master of the short story. Cut short by lung disease, his bohemian life was as adventurous and romantic as his fiction. Follow his meandering path from Edinburgh to France, from California to the South Pacific, where his literary interests turned anthropological, and where death was waiting.

*English 90w. Wordsworth: Seminar - (New Course)*
Catalog Number: 56765 Enrollment: Limited to 15.
James Engell
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Concentrates on poems before 1820: *An Evening Walk, The Ruined Cottage, Home at Grasmere, Lyrical Ballads, The Prelude* (different versions), sonnets, *Poems* of 1807 and collected poems of 1815; also selected later work. The seminar explores Wordsworth’s thematic and formal originality, engagement with nature, moral imagination, his own critical writing, relation to earlier poets, Coleridge’s admiration and critique of his achievement, and recent critical assessments.
*English 90wc. Waste: Contemporary Novels of Abjection - (New Course)*
Catalog Number: 86979 Enrollment: Limited to 15.
Ju Yon Kim
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
This course will examine contemporary novels concerned with the relationship between the environmental and psychic management of material waste, and the formation of outcast and underground communities. We will explore how and why these novels link trash and decay with processes of social exclusion and marginalization. Authors may include Margaret Atwood, Ana Castillo, Don DeLillo, Percival Everett, Kazuo Ishiguro, Haruki Murakami, Richard Powers, Thomas Pynchon, and Karen Tei Yamashita.

*English 90xa. Contemporary Novel and the Art of the Book Review: Seminar*
Catalog Number: 47371 Enrollment: Limited to 15.
Amanda Claybaugh
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
We will read pairs of novels that competed for the same literary prizes (The Line of Beauty and Cloud Atlas, The White Tiger and Sea of Poppies, Freedom and A Visit from the Goon Squad) alongside reviews of these novels--and of post-2000 novels more generally. Students will write short reviews of the assigned novels, as well as writing a longer review essay on novels of their own choosing.

**Tutorials, for Undergraduates Only**

*English 91r. Supervised Reading and Research*
Catalog Number: 1464
Stephen Burt and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Individual instruction in subjects of special interest that cannot be studied in regular courses. 
**Note:** A graded course. May not be taken more than twice and only once for concentration.

*English 98r. Tutorial—Junior Year*
Catalog Number: 3831
Stephen Burt and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged. EXAM GROUP: Fall: 8, 9
Supervised small group tutorial in the study of literature in English. 
**Note:** Limited to honors concentrators.

*English 99r. Tutorial—Senior Year*
Catalog Number: 3901
Stephen Burt and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised individual tutorial in an independent scholarly or critical subject. 
**Note:** Two terms required of all thesis honors seniors. To enroll, students must submit for approval a Thesis Proposal. 
Prerequisite: Satisfactory completion of one term of English 98r, completion of an
undergraduate seminar (90-level) taken in the junior year or earlier, and faculty approval of proposed thesis topic.

**For Undergraduates and Graduates**

**English 102g. Introduction to Old English: Biblical Literature - (New Course)**
Catalog Number: 85065  
Daniel G. Donoghue  
*Half course (fall term). M., W., at 12. EXAM GROUP: 5*
Large portions of the Latin Bible were translated into Old English in the centuries before 1066. Some efforts, like that of Aelfric (10th century), were cautious and painstakingly literal because of the anxiety associated with any departure from the Latin text. Others, moved with interpretative freedom, especially those that exploited the conventions of Old English poetry, so that Moses, for example, leads his people across a desert that resembles the forests of northern Europe, and Satan is a rebel warrior chieftain.

*Note:* This course, when completed with an honors grade and in combination with English 103g, fulfills the College language requirement and the English Department’s Foreign Literature requirement.

**English 103g. Old English: Working with Manuscripts**
Catalog Number: 0326  
Daniel G. Donoghue  
*Half course (spring term). M., W., at 12. EXAM GROUP: 5*
The task of translation will be supplemented by consistent attention to the manuscript contexts of Old English literature. The texts will include selections from the Anglo-Saxon Chronicle, *Genesis*, the Exeter Book *Riddles, Beowulf*, and others. The course will guide students through basic principles of manuscript study and will culminate in a collaborative edition of an Old English text.

*Note:* Fulfills the College language requirement and the English Department’s Foreign Literature requirement.  
*Prerequisite:* Honors grade in English 102g or the equivalent.

**English 111. Epic - (New Course)**
Catalog Number: 12235  
Leah Jane Whittington  
*Half course (fall term). Tu., Th., at 2. EXAM GROUP: 16*
An introduction to epic poetry and to the most significant works in the genre: Homer’s *Iliad* and *Odyssey*, Vergil’s *Aeneid*, Dante’s *Inferno*, and Milton’s *Paradise Lost*. The course examines epic poems in relation to their own historical contexts as well as the interplay between texts in the epic tradition, the shift from epic to novel, and the manifestations of epic narrative in the modern world.

**English 115b. Chaucer: The Canterbury Tales**
Catalog Number: 2945  
Steven Peter Rozenski  
*Half course (spring term). M., W., at 12; Tu., at 7 p.m. EXAM GROUP: 5*
One of the most astonishing, vibrant, multivalent texts in the English language, Chaucer’s *The Canterbury Tales* contains characters high and low telling stories of edification and pleasure, in poetry and prose, on topics bawdy and pious. We will read this work in its entirety, while also looking at some of Chaucer’s shorter poems and the historical and cultural milieu in which he wrote.

**English 126. Shakespeare’s Rome - (New Course)**
Catalog Number: 57556
Leah Jane Whittington
*Half course (spring term). M., W., at 11. EXAM GROUP: 4*
This course investigates Shakespeare’s lifelong engagement with the literature, politics, and culture of ancient Rome. It will give careful attention to the three "Roman Plays" - *Julius Caesar, Antony and Cleopatra,* and *Coriolanus* - but will also consider the larger role of classical antiquity in Shakespeare’s development and achievement as a dramatist.  
**Note:** This course, when taken for letter grade, meets the Department of English Shakespeare requirement.

**English 131. John Milton: An Introduction to His Life and Poetry**
Catalog Number: 8005
Gordon Teskey
*Half course (spring term). M., W., at 12; sections TBA. EXAM GROUP: 5*
This course is an introduction to the work of John Milton, including *Paradise Lost, Paradise Regained,* and *Samson Agonistes,* as well as the major prose on questions of religion, politics, and censorship.

**English 135. Literature and Social Networks: 1700-1800 - (New Course)**
Catalog Number: 81756
Katherine Bennett Gustafson
*Half course (fall term). M., W., at 10. EXAM GROUP: 3*
Social networks existed centuries before Twitter. In this course we will read a range of eighteenth-century British texts, examining how they participated in and were shaped by new communication technologies. Daily newspapers and postal services offered unprecedented access to information while fashionable venues enabled new ways of socializing. These advances, however, fed anxieties about cultural decline. Authors may include Pope, Swift, Defoe, Richardson, Burney, Blake, and Austen as well as period newspapers, philosophy, and engravings.

**English 141. The 18th-Century English Novel**
Catalog Number: 8683
Katherine Bennett Gustafson
*Half course (spring term). M., W., at 10. EXAM GROUP: 3*
We will investigate the diverse history of British novels in the eighteenth century. Exploring its origins in travel writing, romance, and spiritual autobiography to its expansion into the bildungsroman, we will explore how novels reflected ideas about gender, marriage, commerce, and colonial expansion. We will also examine the cultural discourse about novels, tracking their development from a lowly form of entertainment to "high" literature.
Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**English 157. The Classic Phase of the Novel**  
Catalog Number: 4786  
*Philip J. Fisher*  
*Half course (fall term). M., W., at 10. EXAM GROUP: 3*  
A set of major works of art produced at the peak of the novel’s centrality as a literary form: *Sense and Sensibility, Madame Bovary, Anna Karenina, Middlemarch, The Brothers Karamazov, Buddenbrooks*. Society, family, generational novels and the negations of crime and adultery; consciousness and the organization of narrative experience; the novel of ideas and scientific programs; realism, naturalism, aestheticism and the interruptions of the imaginary.  
*Note: This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts A.*

**English 166. American Modernism - (New Course)**  
Catalog Number: 18436  
*David J. Alworth*  
*Half course (fall term). Tu., Th., at 2. EXAM GROUP: 16*  
Covering the 1890s to the 1960s, our emphasis will fall on literary genres (novels, poems, and essays) but we will devote some time to visual art, architecture, and film. Poets may include T.S. Eliot, Ezra Pound, William Carlos Williams, Marianne Moore, Wallace Stevens, Langston Hughes, and Hart Crane. Fiction writers may include Henry James, Theodore Dreiser, Edith Wharton, William Faulkner, Ernest Hemingway, Willa Cather, F. Scott Fitzgerald, Nella Larsen, Jean Toomer, and Djuna Barnes.

**English 168d. Postwar American and British Fiction**  
Catalog Number: 8250  
*James Wood*  
*Half course (spring term). M., W., at 2; W., at 6; Th., at 11; Th., at 1; Th., at 3; W., at 5. EXAM GROUP: 7*  
Examines a range of works, including novels and stories by Saul Bellow, Philip Roth, Raymond Carver, Henry Green, Muriel Spark, Ian McEwan, Penelope Fitzgerald, and Martin Amis. Attempts to situate these books in their larger historical traditions, while emphasizing that we are reading a living literature. Some of the selected authors may visit and address our class.  
*Note: This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.*

**English 170a. High and Low in Postwar America - (New Course)**  
Catalog Number: 93971  
*Louis Menand*  
*Half course (spring term). M., W., at 12. EXAM GROUP: 5*  
Relations between avant-garde, mainstream, and commercial culture from 1945 to 1972.

**English 172. New Immigrant Narratives**  
Catalog Number: 38231
Glenda R. Carpio

Half course (spring term). M., W., at 2; M., at 10; Th., at 4; Tu., at 12. EXAM GROUP: 7

During the last 50 years, the United States has received immigrants from many Latin American, Caribbean, African and Asian countries in contrast to previous waves of immigration which were primarily from northern or eastern Europe. This course will focus on recently published immigrant texts, taking on a comparative approach that is rooted in a historicized exploration of immigrant narratives in American literature. Special emphasis will be given to literary form.

English 181a, Asian American Literature
Catalog Number: 33514
Ju Yon Kim

Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13

This course is both a survey of Asian American literature and an introduction to ongoing debates about what constitutes Asian American literature. How do we determine that a literary work is "Asian American" when the term has been continuously revised and expanded since it came into common usage in the late 1960s? How important are considerations of a work’s thematic concerns, its relationship to specific cultural forms and traditions, or its author’s biography?

English 182, Science Fiction
Catalog Number: 3189
Stephen Louis Burt

Half course (fall term). M., W., at 11. EXAM GROUP: 4

High points, innovations, and explorations in science fiction as a prose genre from the late 19th century to the present: likely readings include Mark Twain, H. G. Wells, Charlotte Perkins Gilman, Robert A. Heinlein, James Tiptree, Jr. (Alice Sheldon), Octavia Butler, William Gibson, Cordwainer Smith, Richard Powers, and more. (Not a course in television or film.)

Note: This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts A.

English 182a, American Drama: 1787 to the Present
Catalog Number: 63728
Ju Yon Kim

Half course (spring term). Tu., Th., at 11; Th., at 4. EXAM GROUP: 13

Theater in the United States has served as a critical site for debating questions of national identity and its relationship to inequity and difference. This course will examine the various dramatic styles, including melodrama, expressionism, and realism, and the themes of economic disillusionment, racial otherness, and estranged family relations that have preoccupied the American stage. Plays may include Uncle Tom’s Cabin, Trifles, Death of a Salesman, Glass Menagerie, Fences, and Fefu and her Friends.

English 184, Literatures of Global English - (New Course)
Catalog Number: 27342
David John Babcock

Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

This course examines what it means to think of English as a "global" literature. From the postcolonial bildungsroman to the global human rights novel, we will explore how authors
reinvent English literary forms for new, unanticipated purposes. In this, we will consider both the
extraordinary communicative reach that English offers, as well as the pitfalls embedded within
its bloody colonial history. Authors: Salman Rushdie, Tsitsi Dangarembga, Jamaica Kincaid,
Jessica Hagedorn, Michael Ondaatje, and others.

**English 192. Political Theatre and the Structure of Drama**
Catalog Number: 10566
Elaine Scarry

*Half course (spring term). M., W., at 1. EXAM GROUP: 6*

The estranged, didactic, intellectual theatre of Brecht, and the ritualistic, emergency theatre of
Artaud serve as reference points for a range of American, English, and Continental plays. The
unique part played by "consent" in theatrical experience. Emphasis on the structural features of
drama: establishing or violating the boundary between audience and stage; merging or separating
actor and character; expanding or destroying language. Readings include Brecht, O’Neill,
Artaud, Genet, Pirandello, Beckett, and such earlier authors as Euripides and Shelley.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for
Aesthetic and Interpretive Understanding or the Core requirement for Literature and Arts A.

**English 194. Literary Criticism: Major Approaches - (New Course)**
Catalog Number: 33543
James Engell

*Half course (fall term). Tu., Th., at 10; Th., at 11; Th., at 3; Th., at 4. EXAM GROUP: 12*

Significant critical orientations: modernism, classicism, romanticism, the New Criticism,
structuralism and post-structuralism, as well as feminism, formalism, and other -isms.
Theoretical formulations yet also practical criticism, history of criticism, and critical writings
oriented toward psychology, language, and cultural contexts. Aristotle, Horace, Johnson,
Coleridge, Schiller, Arnold, Wilde, Eliot, Shklovsky, Freud, Foucault, Barthes, Showalter,
Derrida, Sontag, Frye, Cixous, and others.

**Cross-listed Courses**

[Aesthetic and Interpretive Understanding 12. Poetry in America]
[Aesthetic and Interpretive Understanding 14 (formerly Literature and Arts C-56). Putting
Modernism Together]
[Aesthetic and Interpretive Understanding 15 (formerly English 34). Elements of Rhetoric]
[Aesthetic and Interpretive Understanding 20 (formerly Literature and Arts A-22). Poems,
Poets, Poetry]
[Aesthetic and Interpretive Understanding 37. Introduction to the Bible in the Humanities
and the Arts]
[Aesthetic and Interpretive Understanding 38. The English Language as Literature]
[Aesthetic and Interpretive Understanding 42. Literature and Revolution: Great Books in
Moments of Cultural Transformation]
[Aesthetic and Interpretive Understanding 49 (formerly Medieval Studies 114). The
Medieval Imagination: Visions, Dreams, and Prophecies]
[Aesthetic and Interpretive Understanding 55 (formerly Literature and Arts A-40),
Shakespeare, The Early Plays - (New Course)
African and African American Studies 131. African American Literature from the Beginnings to the Harlem Renaissance

African and African American Studies 133. Zora Neale Hurston, Richard Wright, Ralph Ellison

[Comparative Literature 214. Islandology: Isolating Definitions and Defining Islands]
[Comparative Literature 225. Literature of War and Peace: Imagining and Representing the End of World War II in Europe]
[Comparative Literature 248. American Multilingual Literature in a Transnational Context]
[Comparative Literature 254. Modernist Polemics]
[Comparative Literature 283. Language Differences]

Culture and Belief 45 (formerly English 101). The History of the English Language

[Culture and Belief 49 (formerly Literature and Arts A-86). American Protest Literature from Tom Paine to Tupac]

Culture and Belief 55. Enlightenment Creations of the Self, Society, and Institutions - (New Course)

Culture and Belief 56 (formerly English 193a). The Culture of Capitalism - (New Course)

*Freshman Seminar 33x. Complexity in Works of Art: Ulysses and Hamlet

*Freshman Seminar 34s. The Art of Noticing - (New Course)

*History and Literature 90at. The Postwar American Road Narrative - (New Course)

*Literature 119. On Comparative Arts

[Literature 125. The Desire for Narrative: Across Cultures, Forms and Media]
[Comparative Literature 141. Comparative Modern Anglophone Drama - A Seminar on Genealogy]

*Studies of Women, Gender, and Sexuality 1263. Sexuality and Intimacy in British Literature, 1680-1815 - (New Course)

[United States in the World 23 (formerly English 177). Art and Thought in the Cold War]

United States in the World 34. The Civil War from Nat Turner to Birth of a Nation

Primarily for Graduates

English 221 (formerly English 116). Repetition and Revenge: Graduate Seminar

Catalog Number: 8506
Marjorie Garber
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
The dynamic of repetition is the dynamic of revenge: the ghost, the clue, the trace, the compulsion to repeat. Drawing on selected works of Freud and contemporary literary theory, this course examines Elizabethan and Jacobean revenge tragedies and the plays of Shakespeare together with relevant modern works of drama, fiction, history, film, and video.

*English 228. Milton: Graduate Seminar - (New Course)

Catalog Number: 74577
Gordon Teskey
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
A survey of Milton’s life and poetry.
**English 233. Trans-Reformation English Writing: Graduate Seminar - (New Course)**
Catalog Number: 44363
James Simpson
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
English literary history shies away from one of cultural history’s most momentous revolutions: the Reformation. This course looks to a series of discursive areas (e.g. literature, theology, politics) to shape that literary history. We will look to both canonical and non-canonical texts, from Chaucer to Shakespeare; each session will be grounded in a Houghton-possessed book.

**English 249. The Poetry and Prose of Robert Lowell: Graduate Seminar - (New Course)**
Catalog Number: 23055
Helen Vendler
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
A study of the lyric poetry and some prose by Robert Lowell, emphasizing intellectual, thematic, and generic change.

**English 251. Comparative Romantic Theory: Graduate Seminar**
Catalog Number: 5675
James Engell
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Key romantic topics that remain relevant to literature and art, e.g., symbol, language, aesthetics, nature (“green” romanticism), history, irony, gender. Coleridge, Wordsworth, Shelley, Kant, Schelling, Schiller, Emerson, Fuller, and Poe; others and recent critics as well.

**English 259. Methods in Book History: Graduate Seminar**
Catalog Number: 1402
Leah Price
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Introduces students to methods and debates in the history of the book and of reading.
*Note:* Open to advanced undergraduates with permission of instructor.

**English 261. Joyce/Beckett: Graduate Seminar - (New Course)**
Catalog Number: 95885
Martin Puchner
Half course (fall term). M., 5–7 p.m. EXAM GROUP: 9
The seminar offers an in-depth study of *Ulysses* and of Beckett’s dramatic oeuvre. It doubles as an introduction to scholarly methods, including biography, history of the book, genre, geography, theater history, media studies, and philosophy.

**English 278. Art and Thought in the Cold War: Graduate Seminar - (New Course)**
Catalog Number: 78073
Louis Menand
Half course (spring term). M., 5–7 p.m. EXAM GROUP: 9
Political theory and international relations as contexts for American literary, artistic, and intellectual culture after 1945.
**English 281. The Novel in History: Graduate Seminar - (New Course)**

Catalog Number: 80778  
Amanda Claybaugh  
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*  
An exploration of historicist scholarship, by way of the historical novel. The first half of the course will focus on novels dealing with slavery; the second on novels and problems of the students own choosing.

**English 282. American Poetry and Literary History: Graduate Seminar - (New Course)**

Catalog Number: 29256  
Elisa New  
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*  
Exploring the relationship between poems and their contexts, we survey a range of historical, cultural and critical contexts fruitfully engaged by critics of the American poem as well as some critical and ideological implications.

**English 285e. The New Economic Criticism: Graduate Seminar**

Catalog Number: 3446  
Marc Shell  
*Half course (fall term). M., 3–5. EXAM GROUP: 8, 9*  
Focuses on issues of monetary and linguistic representation and exchange, with special attention to metaphorization, to historical introductions of new monetary economic and literary media, and to various kinds of connections between economic and aesthetic production. Readings include Heraclitus, Herodotus, Aristotle, Sophocles, medieval tales of the Holy Grail, Shakespeare, Rousseau, Goethe, Marx, Melville, Heidegger, and many theorists of digital representation and exchange in the twenty-first century.

**English 286b. William Carlos Williams: Graduate Seminar**

Catalog Number: 90056  
Stephen Louis Burt  
*Half course (spring term). M., 3–5. EXAM GROUP: 8, 9*  
The democratic modernisms of William Carlos Williams, in several kinds of poetry and prose, from the late 1910s to the early 1960s, with some attention to his contemporaries and rivals.

**English 290. Literary Theory and Cultural Criticism: Reading 9/11**

Catalog Number: 88024  
Homi K. Bhabha  
*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*  
This course explores "9/11"-event, history, myth-as a site of cultural and critical intervention in the arts and humanities. We will engage with a range of philosophical reflections on "9/11" and its impact on our understanding of historical temporality, the phenomenology of shock and anxiety, human security, and the politics of terror. A wide range of literary genres, artistic practices, journalistic narratives, and cinematic sources will be used to illustrate the cultural myths and realities provoked by the constellation of ideas and experiences we associate with "9/11."
*English 294z. On Beauty: Graduate Seminar*
Catalog Number: 7277
Elaine Scarry
*Half course (spring term). Th., 11–1. EXAM GROUP: 13, 14*
Philosophic and literary accounts of beauty from Greek through modern, including Plato, Aquinas, Dante, Kant, Keats, and Rilke. In addition, the major arguments against beauty; and its stability across four objects (God, gardens, persons, and poems).

*English 295a. Frameworks in the Humanities: The Art of Reading (Graduate Seminar in General Education) - (New Course)*
Catalog Number: 62839
Homi K. Bhabha
*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on "The Art of Reading," by addressing questions such as the distinction between seeing and looking, hearing and listening and, ultimately, between sense and sensibility.

*Note: The seminar will design and develop a General Education course on these themes for undergraduates.*

Graduate Courses of Reading and Research

*English 300hf. Old and Middle English: Doctoral Conference*
Catalog Number: 2334
Daniel G. Donoghue 1469, Joseph C. Harris 1089, James Simpson 4791, and Nicholas Watson 3851 (on leave 2012-13)
*Half course (throughout the year). Hours to be arranged.*
The Conference focuses upon dissertations in progress and other research topics of mutual concern. Membership limited to faculty members teaching or conducting research in medieval English language and literature and to graduate students working in this field.

*Note: Enrollment is open to all graduate students but is required of those who have been admitted to candidacy for the PhD and who intend to work on a medieval subject.*

*English 302hf. Renaissance: Doctoral Conference*
Catalog Number: 2814
Marjorie Garber 7264, Stephen J. Greenblatt 3436 (on leave 2012-13), and Gordon Teskey 4466
*Half course (throughout the year). Alternate W., at 4:15.*
The Conference focuses upon dissertations in progress and other research topics of mutual interest.

*Note: Limited to faculty members teaching or conducting research in Renaissance literary studies and to graduate students working in the field. Enrollment is open to all such students, and is required of those who have been admitted to candidacy for the PhD and who intend to work on Renaissance topics.*

*English 304hf. The Extended 18th-Century: Doctoral Conference*
Catalog Number: 6110
James Engell 8076, Leah Price 3501, and Michael Shinagel 7659

Half course (throughout the year). Hours to be arranged.

Focuses on dissertations, dissertations in progress, and research topics of mutual interest.

*Note:* Required of graduate students working, or intending to work, on the Restoration, 18th century, or Romanticism (the periods 1660–1830), and who have been admitted to candidacy for the PhD. Open to other students working on topics in Restoration and 18th-century literature.

*English 306hf. 19th- and 20th-Century British Literature: Doctoral Conference*

Catalog Number: 5268

Leah Price 3501

Half course (throughout the year). Hours to be arranged.

*English 308hf. Drama: Doctoral Conference*

Catalog Number: 6909

Ju Yon Kim 2986 and Martin Puchner 5842

Half course (throughout the year). Hours to be arranged.

Focuses on research topics related to dramatic literature, theatre, and performance. Open to all faculty members and graduate students teaching or conducting research in the field.

*English 310hfr. American Literature and Culture: Doctoral Conference*

Catalog Number: 6235

Elisa New 2428 and Werner Sollors 7424 (on leave spring term)

Half course (throughout the year). Hours to be arranged.

Colloquium open to all graduate students working in the area of American literature and culture. Papers delivered by students writing seminar papers or dissertations, faculty members, and visiting scholars.

*English 350. Teaching Colloquium*

Catalog Number: 8208

Marjorie Garber

Half course (fall term). Hours to be arranged.

The craft of teaching (discussion, lectures, tutorials, course descriptions, syllabi). This colloquium, designed for third-year graduate students, also considers issues related to the field exam, prospectus, and other aspects of advanced graduate study in English.

*Note:* Required of all third-year graduate students.

*English 397. Directed Study*

Catalog Number: 6588

Members of the Department

*English 398. Direction of Doctoral Dissertations*

Catalog Number: 5968

Daniel Albright 4615 (on leave 2012-13), Homi K. Bhabha 4100, Stephen Louis Burt 5945 (fall term only), Glenda R. Carpio 4408, Amanda Claybaugh 5800, Daniel G. Donoghue 1469, James Engell 8076, Philip J. Fisher 1470 (on leave spring term), Marjorie Garber 7264, Henry Louis Gates, Jr. 2899, Jorie Graham 2358 (on leave fall term), Stephen J. Greenblatt 3436 (on leave
2012-2013 Previous Courses of Instruction

2012-13), Joseph C. Harris 1089, Matthew Kaiser 5443 (fall term only), Louis Menand 4752 (on leave fall term), Elisa New 2428, Leah Price 3501, Martin Puchner 5842, Peter Sacks 2161 (on leave fall term), Elaine Scarry 2206, Marc Shell 3176, Michael Shinagel 7659, James Simpson 4791, Werner Sollors 7424 (on leave spring term), John Stauffer 1006, Gordon Teskey 4466, Helen Vendler 7226, Andrew Warren 6838, and Nicholas Watson 3851 (on leave 2012-13)

Note: Normally limited to students reading specifically in the field of a proposed doctoral dissertation. Open only by petition to the Department; petitions should be presented during the term preceding enrollment, and must be signed by the instructor with whom the reading is to be done. All applicants for admission should first confer with the Director of Graduate Studies.

*English 399. Reading and Research
Catalog Number: 1825

Members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.

Note: Conducted through regular conferences and assigned writing. Limited to students reading specifically on topics not covered in regular courses. Open only by petition to the Department; petitions should be presented during the term preceding enrollment, and must be signed by the instructor with whom the reading is to be done. All applicants for admission should first confer with the Director of Graduate Studies.

Environmental Science and Public Policy

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Degrees in Environmental Science and Public Policy

Paul R. Moorcroft, Professor of Organismic and Evolutionary Biology (Chair)
John Briscoe, Gordon McKay Professor of the Practice of Environmental Engineering
William C. Clark, Harvey Brooks Professor of International Science Public Policy and Human Development, Kennedy School of Government (Kennedy School)
Richard T. T. Forman, Professor of Advanced Environmental Studies in the Field of Landscape Ecology (Design School)
Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies at the John F. Kennedy School of Government (Kennedy School)
Jonathan Losos, Monique and Philip Lehner Professor for the Study of Latin America and Curator in Herpetology (on leave spring term)
James J. McCarthy, Professor of Biological Oceanography and Alexander Agassiz Professor of Biological Oceanography
Michael B. McElroy, Gilbert Butler Professor of Environmental Studies
Ann Pearson, Murray and Martha Ross Professor of Environmental Sciences
Anne E. Pringle, Associate Professor of Organismic and Evolutionary Biology
Forest Lee Reinhardt, John D. Black Professor (Business School)
Andrew Richardson, Assistant Professor of Organismic and Evolutionary Biology
Daniel P. Schrag, Sturgis Hooper Professor of Geology and Professor of Environmental Science and Engineering
John H. Shaw, Harry C. Dudley Professor of Structural and Economic Geology, Harvard College Professor
Robert N. Stavins, Albert Pratt Professor of Business and Government at the John F Kennedy School of Government (Kennedy School)
Martin L. Weitzman, Professor of Economics
Steven C. Wofsy, Abbott Lawrence Rotch Professor of Atmospheric and Environmental Science, Area Dean for Environmental Science and Engineering

Other Faculty Offering Instruction in Environmental Science and Public Policy

George Pierce Baker, Herman C. Krannert Professor of Business Administration (Business School)
James K. Hammitt, Professor of Economics and Decision Sciences (Public Health)
Calestous Juma, Professor of the Practice of International Development (Kennedy School)
Jennifer Leaning, Francois-Xavier Bagnoud Professor of the Practice of Health and Human Rights (Public Health)
Xi Lu, Lecturer on Environmental Science and Public Policy
John Daniel Spengler, Akira Yamaguchi Professor of Environmental Health and Human Habitation (Public Health)

The Environmental Science and Public Policy concentration is overseen by a Standing Committee functioning as a Board of Tutors including representatives from several departments of the Faculty of Arts and Sciences and from other schools as appropriate to ensure the requisite breadth of the program.

The concentration is designed to provide a multidisciplinary introduction to current problems of the environment. It is founded on the premise that the ability to form rational judgments concerning many of the complex challenges confronting society today involving the environment requires both an understanding of the underlying scientific and technical issues and an appreciation for the relevant economic, political, legal, historical, and ethical dimensions. It offers students an opportunity to specialize in a specific area of either natural or social science relating to the environment. All students have to satisfy a core of requirements in biology, chemistry, earth and planetary sciences, economics, government, and mathematics.

Primarily for Undergraduates

Environmental Science and Public Policy 10. Environmental Policy
Catalog Number: 6383 Enrollment: Limited to 40.
John Briscoe
Half course (spring term). M., W., 2:30 to 4; sections TBA. EXAM GROUP: 7, 8
This course develops the concepts and skills needed to design effective public policy for managing interactions between environmental, social and economic systems. The course is organized around cases of real-world policy analysis, some from the US and some involving developing countries. We will examine the environmental, social and economic substance of the cases, the interests of stakeholders, the policy and political processes, the ways in which trade-offs are perceived and evaluated, and the outcomes and impacts.

*Note:* Intended for interested students from all concentrations.

**Environmental Science and Public Policy 78. Environmental Politics**
Catalog Number: 3613
Sheila Jasanoff (Kennedy School)

*Half course (fall term). M., W., (F.), at 10. EXAM GROUP: 3*

An introduction to the history, organization, goals, and ideals of environmental protection in America. Examines the shift in emphasis from nature protection to pollution control to sustainability over the past hundred years and develops critical tools to analyze changing conceptions of nature and the role of science in environmental policy formulation. Of central interest is the relationship between knowledge, uncertainty, and political or legal action. Theoretical approaches are combined with case studies of major episodes and controversies in environmental protection.

**Environmental Science and Public Policy 90. Junior Seminars**

Enrollment in these seminars is limited, with preference given to Environmental Science and Public Policy concentrators in their junior year. One junior seminar fulfills the junior seminar requirement for Environmental Science and Public Policy concentrators.


Catalog Number: 2189
Michael B. McElroy

*Half course (fall term). M., 1–4.*

The seminar will provide an account of the technologies that shape our world with a perspective on how they evolved, the benefits that ensued and the environmental challenges that arose as a consequence. Topics include prospects for renewable energy and options to minimize damage from conventional sources of energy. Specific attention is directed to challenges faced by large developing economies emphasizing the need for a cooperative approach to ensure an equable, environmentally sustainable, global future.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science A.

[*Environmental Science and Public Policy 90c. Ecology and Land-Use Planning*]

Catalog Number: 3792
Richard T. T. Forman (Design School)

*Half course (spring term). T., 2-5:15, including a required one-week field study, and a one-day field study.*

Investigation of how local and regional human activities such as housing, agriculture, water
supply, and natural resource use can be arranged in the landscape so that environmental processes are not disrupted and ecosystems are maintained for the long term. The focus is on learning and applying spatial and ecological principles to land-use planning with the intention of regional biodiversity conservation, maintenance of water quality, and addressing other environmental issues.

[*Environmental Science and Public Policy 90e. Conservation Biology*]
Catalog Number: 6879
Instructor to be determined
Half course (spring term). Hours to be arranged.
Conservation biology strives to describe, understand, and preserve biodiversity by applying ecological and evolutionary theory within the contexts of resource management, economics, sociology, and political science. This course will explore the moral and scientific motivations for preserving biodiversity and practice decision making under conflicting interests. Case studies will focus the examination of major contemporary issues in conservation biology such as endangered species protection and reintroduction, habitat fragmentation, over-harvesting of biological resources, exotic species invasions, and sustainable development. There will be local field trips within New England.
Note: Expected to be given in 2013–14. Local field trips within New England to be arranged.

*Environmental Science and Public Policy 90j. Environmental Crises and Population Flight*
Catalog Number: 9841
Jennifer Leaning (Public Health) and James J. McCarthy
War, disaster, drought, or famine force people to flee their land. The humanitarian consequences of this loss of place and livelihood are filled with complexity, relating to the extent and permanence of environmental destruction wrought by these crises, people’s attachment to their homes and ecosystems, the circumstances of departure, the destinations of refuge, and the possibilities for return. These issues will be examined through case studies and review of literature on forced migration and calamity.

*Environmental Science and Public Policy 90n. China’s Energy Economy: Perspectives from the Past: Challenges for the Future*
Catalog Number: 8477
Michael B. McElroy and Xi Lu
Half course (fall term). W., 2:30–5.
The seminar will provide a historical perspective on the development of the Chinese economy with emphasis on the energy sector, including analysis of related environmental problems. Energy options available for China’s future will be discussed, including opportunities for clean-coal technology, nuclear, wind, hydro, and biofuels. The seminar will discuss tradeoffs implicit in these choices with respect to reconciling competing goals for environmental protection and economic development.

*Environmental Science and Public Policy 90p. Biotechnology, Sustainability and Public Policy*
Catalog Number: 62576
_Calestous Juma (Kennedy School)_
_Half course (fall term). Th., 2:30–5._
This seminar examines the implications of biotechnology for sustainability. Using case studies, it focuses on policy approaches for maximizing the benefits of biotechnology and minimizing their risks. It addresses the following themes: (1) scientific and technological advances in biotechnology and sustainability; (2) social responses to the use of biotechnology; (3) application of biotechnology specific sectors such as agriculture; industry; energy; bioremediation and species conservation; (4) socio-economic impacts; and (5) policy and institutional considerations.

*Environmental Science and Public Policy 90s. The Technology, Economics, and Public Policy of Renewable Energy*
Catalog Number: 53953 Enrollment: Limited to 50.
_George Pierce Baker (Business School)_
_Half course (spring term). Th., 1–4._
Energy is the lifeblood of economic activity, and there is little prospect of this changing. However, the planet’s stores of easily accessed fossil fuels are limited, and the climatological cost of continuing to rely on fossil fuels is high. This course examines the long run and short run prospects for renewable energy. We start by understanding the technology of hydro, solar, wind, and biomass. We then examine the economics of these technologies, and how subsidies and taxes affect their viability. Special attention will be paid to the interaction of technology, economics, and public policy.
Note: This course will be offered in a seminar format with an enrollment limit of 50.
Prerequisite: Economics 10a.

_Environmental Science and Public Policy 90t. Environmental Health: Your World and Your Life at Risk_
Catalog Number: 40047
_John Daniel Spengler (Public Health)_
_Half course (spring term). M., 2:30-5 with local field trips to be arranged._
Through the seminar course students will be introduced to ongoing environmental health research. They will read published articles and interview faculty. Studies will include birth outcomes and heavy metals; neurological and cognitive development in children exposed to lead; dietary interventions and pesticide exposure; asthma and public housing; air pollution and cardiovascular health; exposures and effects of plasticizers, flame retardants, polychlorinated biphenyls (PCBs), bisphenol A (BPA) and other synthetic organic compounds; cell phone use and brain cancer; respiratory effects of biomass cooking and heat fuels on children and women; heat waves and heat stress mortality; and land-use factors and obesity.

_Environmental Science and Public Policy 90v. Economic Evaluation of Environmental Regulation - (New Course)_
Catalog Number: 74118
_James K. Hammitt (Public Health)_
_Half course (fall term). Tu., 2:30–5._
What level of environmental protection is best? Stronger regulations provide greater protection
against the target harm, but generally at the cost of reduced economic consumption or increases in other environmental harms. What principles can be used to determine the ‘right’ level of protection, and how can regulations be evaluated? This course provides an introduction to environmental risk assessment and benefit-cost analysis of environmental regulation, incorporating theory and case studies.

*Environmental Science and Public Policy 91r, Supervised Reading and Research*
Catalog Number: 1705
Paul R. Moorcroft and Members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading and research on topics not covered by regular courses of instruction. Students must complete a registration form, including permission from their faculty sponsor, with the concentration office before course enrollment. A final paper describing the research/reading completed during the term is due in duplicate to the Head Tutor on the first day of reading period.

*Note:* Intended for junior and senior concentrators in Environmental Science and Public Policy; open to sophomore concentrators only under exceptional circumstances. Permission of the Head Tutor is required for enrollment. May be counted for concentration only with the special permission of the Head Tutor.

*Environmental Science and Public Policy 99, Tutorial — Senior Year*
Catalog Number: 5666
Paul R. Moorcroft and Members of the Committee
Full course. Hours to be arranged.
Research and writing of the senior thesis under faculty direction. Senior honors candidates must take at least one term of this course while writing a thesis. The signature of the faculty adviser is required.

Ethnic Studies

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Committee on Ethnic Studies*

Kay Kaufman Shelemay, G. Gordon Watts Professor of Music and Professor of African and African American Studies (Chair)
Jacqueline Bhabha, University Advisor on Human Rights Education, Professor of the Practice of Health and Human Rights (Public Health), Director of Research FXB Center (Public Health), and Jeremiah Smith, Jr. Lecturer on Law (Law School)
Glenda R. Carpio, Professor of English and of African and African American Studies
Joyce E. Chaplin, James Duncan Phillips Professor of Early American History
Jean Comaroff, Alfred North Whitehead Professor of African and African American Studies and of Anthropology
John Comaroff, Hugh K. Foster Professor of African and African American Studies and of Anthropology
Caroline M. Elkins, Professor of History (on leave 2012-13)
Deborah D. Foster, Senior Lecturer on Folklore and Mythology
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Walter Johnson, Winthrop Professor of History and Professor of African and African American Studies
Tamara Kay, Associate Professor of Sociology
Ju Yon Kim, Assistant Professor of English
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Jennifer Leaning, Francois-Xavier Bagnoud Professor of the Practice of Health and Human Rights (Public Health)
Matthew Joseph Liebmann, Associate Professor of Anthropology
Shelly C. Lowe, Executive Director of the Harvard University Native American Program
Stephen P. Marks, Francois-Xavier Bagnoud Professor of Health and Human Rights (Public Health)
Ingrid Monson, Quincy Jones Professor of African-American Music, Supported by the Time Warner Endowment (on leave 2012-13)
Gerald L. Neuman, J. Sinclair Armstrong Professor of International, Foreign, and Comparative Law (Law School)
Dennis Keith Norman, Associate Professor of Psychology in the Department of Psychiatry (Medical School)
Maria Luisa Parra-Velasco, Senior Preceptor in Romance Languages and Literatures
Michael J. Puett, Walter C. Klein Professor of Chinese History
Laurence A. Ralph, Assistant Professor of African and African American Studies and Anthropology (on leave 2012-13)
Fernando Miguel Reimers, Ford Foundation Professor of International Education (School of Education)
Mayra Rivera Rivera, Assistant Professor of Theology and Latina/o Studies (Divinity School)
Marc Shell, Irving Babbitt Professor of Comparative Literature and Professor of English
Beth A. Simmons, Clarence Dillon Professor of International Affairs
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of African and African American Studies
Kimberly Theidon, John L. Loeb Associate Professor of the Social Sciences
Gary Urton, Dumbarton Oaks Professor of Pre-Columbian Studies

**Affiliated Members**

Faculty members from across the disciplines and schools whose work focuses on ethnicity, migration, indigeneity, and human rights cooperate in this interdisciplinary committee to provide
course enrichment for Harvard College students, particularly in Asian American/Transpacific, Native American/Indigenous, and US Latino/American hemispheric topics, with an American focus as well as a transnational one. Ethnic Studies courses address race critique in the social sciences and in the humanities, consider the role of mobility, diasporas and migration as well as of indigeneity in the configuration of group identities and power formations. An overarching concern is the study of the historical, political and cultural forms through which individuals inhabit the political space of the nation and of the transnational sphere, frequently in the wake of colonialism and displacements that have created stateless people. Bringing to bear the discourse of human rights, Ethnic Studies courses consider the ethics of responsibility that the University must try to foster as it trains citizens and leaders to deal with the construction of political communities as well as the situation of those who are deprived of their legal status.

Ethnic studies are inherently comparative. Those who wish to understand the uniqueness of a particular people can do so most effectively by comparisons with others. Scholars and students seek to understand why the boundaries of particular ethnic groups change and why this process of ethnic group formation is so fluid. The study of ethnicity at Harvard is focused on the broad canvas of the human experience. While it includes the United States at its center, it is enriched by being situated in a broadly comparative and transnational context. Moreover, the focus of many courses is explicitly historical, making for a better understanding of the changing ways in which individuals choose to affiliate or have been coerced into categories by others.

**Portal Courses**

**English 172. New Immigrant Narratives**  
**Ethical Reasoning 11. Human Rights: A Philosophical Introduction**  
*Sociology 98L. Racism and Anti-Racism in Comparative Perspective*  
**Sociology 183. Race and Ethnic Relations**  
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]

**General Education Courses in Ethnic Studies**

**Aesthetic and Interpretive Understanding 13. Cultural Agents**  
[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]  
**Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes—Culture, History, and Beliefs in Andean South America**  
**Ethical Reasoning 11. Human Rights: A Philosophical Introduction**  
**Ethical Reasoning 30. The Just World**  
[United States in the World 28. Exploration and Empire Building]  
**Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!**  
**Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation**  
**Societies of the World 44. Human Trafficking, Slavery and Abolition in the Modern World**
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]
[United States in the World 24 (formerly Sociology 19). Reinventing Boston: The Changing American City]

United States in the World 26 (formerly Studies of Women, Gender, and Sexuality 1000sc). Sex and the Citizen: Race, Gender, and Belonging in the United States


Freshman Seminars

*Freshman Seminar 42v. Human Rights Between Rhetoric and Reality

African and African American Studies

African and African American Studies 10. Introduction to African American Studies
African and African American Studies 20. Introduction to African Languages and Cultures
African and African American Studies 97. Sophomore Tutorial
African and African American Studies 104v. Transnational Feminisms
[ African and African American Studies 111. Spectral Fictions, Savage Phantasms: Race and Gender in Anti-Racist South African and African American Drama, Fiction and Film ]
African and African American Studies 114x. From Cesária Évora to Dama Do Bling: Music, Language, and Digital Media in the Former Portuguese Colonies - (New Course)
African and African American Studies 117x. Of Mean Streets and Jungle Fevers: Race, Gender and Ethnicity in Martin Scorsese and Spike Lee
African and African American Studies 118. The History of African Americans From the Slave Trade to the Great Migration
African and African American Studies 120x. African American Theatre, Drama, and Performance - (New Course)
African and African American Studies 131. African American Literature from the Beginnings to the Harlem Renaissance
[ African and African American Studies 179 (formerly Literature and Arts B-82). Jazz, Freedom, and Culture ]
African and African American Studies 183x. Queer of Color Theory - (New Course)
African and African American Studies 197. Poverty, Race, and Health

Ancient Near East
Ancient Near East 230. Ethnicity and Boundary Maintenance in Ancient Israel of the Iron I Period: Israelites, Philistines and Canaanites - (New Course)

Anthropology

Anthropology 1190. Encountering the Conquistadors  
[Anthropology 1682. Gangsters and Troublesome Populations]  
Anthropology 1755 (formerly Anthropology 1755). Creole Pop Iconographies  
Anthropology 1795. The Politics of Language and Identity in Latin America

Comparative Literature

Comparative Literature 263. Journey, Exile, and Displacement in Modern Arabic Literature  
[Literature 103 (formerly Literature 10). Writing Across Cultures: Literatures of the World (to 1750)]

East Asian Studies

East Asian Studies 103. Ethnic Politics in Contemporary China - (New Course)

Economics

*Economics 980u. Immigration Economics

English

*English 90ac. Cut Tongue Theaters: Asian American and Chicana/o Playwrights: Seminar - (New Course)  
English 172. New Immigrant Narratives  
English 181a. Asian American Literature

Expository Writing

[Expository Writing 20.066. Cross-Cultural Contact Zones]  
[Expository Writing 20.067. Cross-Cultural Contact Zones]  
[Expository Writing 20.068. Cross-Cultural Contact Zones]  
[Expository Writing 20.069. Cross-Cultural Contact Zones]

Government

Government 40. International Conflict and Cooperation  
*Government 94al. Global Distributive Justice  
*Government 94gl. Inhuman Wrongs: Crimes Against Humanity in Theory, Politics, and Law  
*Government 94hu. Human Rights Scholars Seminar
*Government 94mg. The Politics of Immigration
*Government 94of. Law and Politics in Multicultural Democracies
*Government 94zg (formerly *Government 98zg). Ethnic Politics and Conflict

History

[*History 72k. The Worlds of Joseph Conrad]
*History 75f. Before and After 2012: History of the Maya - (New Course)
*History 1329. Human Rights: History and Theory - (New Course)
History 1511. Latin America and the United States - (New Course)
History 1512. Dirty Wars, Peace Processes, and the Politics of History in Latin America: Conference Course - (New Course)
*History 1911. Pacific History: Conference Course - (New Course)
[*History 1965 (formerly *History 89f). International History: States, Markets, and the Global Economy: Conference Course]

Human Evolutionary Biology

Human Evolutionary Biology 1540. Human Migration - (New Course)

Latin American Studies

Latin American Studies 70. Modernity, Culture and Politics in Latin America

Music

*Music 97c. Music History and Repertory: Music in Cross-Cultural Perspective

Philosophy

Philosophy 179. Race and Social Justice

Psychology

Psychology 1514. Us and Them: Challenges and Possibilities in Intergroup Relations - (New Course)
*Psychology 2451. Psychology of Racism, Prejudice, and Discrimination - (New Course)

The Study of Religion

Religion 1506. Gender, Race, and Transformation Latina Theory - (New Course)

Romance Languages and Literatures

*French 59. French and the Community
Portuguese 30 (formerly Portuguese 37). Brasil hoje: Contemporary Brazilian Culture
through Media
*Portuguese 59. Portuguese and the Community
*Spanish 59. Spanish and the Community
Spanish 90c. Spectacles of Race: Representations of Racial Belonging and Difference in the Hispanic Caribbean - (New Course)

Social Studies

*Social Studies 98li. Protest and Violence in Asia: Ethnicity, Religion, and Other Motivations
*Social Studies 98mg. Global Distributive Justice
*Social Studies 98mi. Migration in Theory and Practice
*Social Studies 98nd. Mass Violence, Memory, and Justice/Reconciliation
*Social Studies 98ne. Nation, Race, and Migration in Modern Europe
*Social Studies 98nx. Human Rights and International Law - (New Course)

Sociology

*Sociology 38. Visualizing Global Social Problems and Social Change in Documentary Photography and Film - (New Course)
*Sociology 98Ga. Understanding Mexican Migration Flows to the US
*Sociology 98L. Racism and Anti-Racism in Comparative Perspective
[*Sociology 98Wb. Race, Poverty, and Family Justice]*
[Sociology 129. Education and Society]
Sociology 175. Sociology of Immigration
Sociology 183. Race and Ethnic Relations
Sociology 248. Race, Politics, and Social Inequality: Seminar
Sociology 254. Social Structure and Culture in the Study of Race and Urban Poverty

Studies of Women, Gender, and Sexuality

Studies of Women, Gender, and Sexuality 1168. Education, Race, and Gender in the United States
*Studies of Women, Gender, and Sexuality 1411. Sex, Gender Roles, and Sexuality in Native America

European Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION
Faculty of the Committee on European Studies

Grzegorz Ekiert, Professor of Government (Chair)
Philippe Aghion, Robert C. Waggoner Professor of Economics
Alberto F. Alesina, Nathaniel Ropes Professor of Political Economy (on leave 2012-13)
Jason Beckfield, Professor of Sociology
Jonathan H. Bolton, Professor of Slavic Languages and Literatures
Peter J. Burgard, Professor of German (on leave spring term)
Niall Ferguson, Laurence A. Tisch Professor of History (on leave spring term)
Peter E. Gordon, Amabel B. James Professor of History, Harvard College Professor (on leave 2012-13)
Peter A. Hall, Krupp Foundation Professor of European Studies
Maya Jasanoff, Professor of History
Alison Frank Johnson, Professor of History
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Charles S. Maier, Leverett Saltonstall Professor of History
Daniel F. Ziblatt, Professor of Government (on leave 2012-13)

The Standing Committee on European Studies is the formal oversight body for the Minda de Gunzburg Center for European Studies. It is comprised of those permanent faculty members who have offices in the Center and selected other representatives of FAS and of other universities in the Boston area who remain active in the study and teaching of modern Europe.

For over thirty years, the Center for European Studies has offered an interdisciplinary program designed to enhance the knowledge and understanding of political, social, economic, and cultural developments in modern Europe. Its members’ intellectual approaches encompass history, political science, political economy, anthropology, sociology, and cultural studies. Its purview includes all the regions of Europe as well as the institutional structures within individual countries and the European Union. The Center funds undergraduate thesis travel, dissertation fellowships, and offers several post-doctoral fellowships. Its quarters in Busch Hall provide office space for faculty, visiting scholars, and doctoral students on Europe. At the same time, the Center supports several study groups that maintain a schedule of seminars and presentations by visiting scholars and speakers from the world of public affairs and it organizes periodic conferences and workshops on European affairs. It maintains a program for the study of Germany and Europe initially funded by the Federal Republic of Germany and now supported by the Center’s endowments. The Center is actively engaged in cooperation to advance European studies with other Harvard Faculties and Boston-area universities.
Expository Writing

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Standing Committee on Undergraduate Educational Policy

Evelyn M. Hammonds, Barbara Gutmann Rosenkrantz Professor of the History of Science and of African and African American Studies, Dean of Harvard College (Oversight Dean)
Michael D. Smith, John H. Finley, Jr. Professor of Engineering and Applied Sciences, Dean of the Faculty of Arts and Sciences (Chair)
Michael J. Aziz, Gene and Tracy Sykes Professor of Materials and Energy Technologies
Noël Bisson, Associate Dean of Undergraduate Education
Jeremy Bloxham, Mallinckrodt Professor of Geophysics, Dean of Science
Jonathan H. Bolton, Professor of Slavic Languages and Literatures
Rowan K. Flad, Professor of Anthropology
Jay M. Harris, Harry Austryn Wolfson Professor of Jewish Studies and Dean of Undergraduate Education
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Stephanie H. Kenen, Administrative Director of the Program in General Education and Associate Dean of Undergraduate Education
Jill M. Lepore, David Woods Kemper ’41 Professor of American History, Harvard College Professor
Robert A. Lue, Professor of the Practice of Molecular and Cellular Biology
Peter V. Marsden, Edith and Benjamin Geisinger Professor of Sociology, Harvard College Professor, Dean of Social Science
Xiao-Li Meng, Whipple V.N. Jones Professor of Statistics, Dean of the Graduate School of Arts and Sciences
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
D. N. Rodowick, William R. Kenan, Jr. Professor of Visual and Environmental Studies
John H. Shaw, Harry C. Dudley Professor of Structural and Economic Geology, Harvard College Professor
Diana Sorensen, James F. Rothenberg Professor of Romance Languages and Literatures and of Comparative Literature, Dean of Arts and Humanities
Michael A. Szonyi, Professor of Chinese History
Gu-yeon Wei, Gordon McKay Professor of Electrical Engineering and Computer Science

Other Faculty Offering Instruction in Expository Writing
Jerusha T. Achterberg, Preceptor in Expository Writing
Laura L. Adams, Lecturer on Sociology
Michael S. Allen, Preceptor in Expository Writing
Christina Kim Becker, Preceptor in Expository Writing
Patricia M. Bellanca, Preceptor in Expository Writing
Kevin Brian Birmingham, Preceptor in Expository Writing, Lecturer on History and Literature
Erin Leigh Blevins, Preceptor in Expository Writing
Owen Chen, Preceptor in Expository Writing
Vernon Tad Davies, Preceptor in Expository Writing
Justine Renee De Young, Preceptor in Expository Writing
James A. Dennen, Preceptor in Expository Writing
Dwight Fee, Preceptor in Expository Writing
Elizabeth Greenspan, Preceptor in Expository Writing
David Hahn, Preceptor in Expository Writing
Karen L. Heath, Senior Preceptor in Expository Writing
James P. Herron, Preceptor in Expository Writing
Elissa Krakauer Jacobs, Preceptor in Expository Writing (on leave spring term)
Thomas R. Jeln, The Sosland Director of the Harvard College Writing Program
Jonah M. Johnson, Preceptor in Expository Writing
Matthew T. Levay, Preceptor in Expository Writing
Ariane Mary Liazos, Preceptor in Expository Writing
Michele C. Martinez, Preceptor in Expository Writing
Deirdre Alanna Mask, Preceptor in Expository Writing
Kelsey W. McNiff, Preceptor in Expository Writing
Donna L. Mumme, Preceptor in Expository Writing
Sara A. Newland, Preceptor in Expository Writing
Tess O'Toole, Preceptor in Expository Writing
Jane A. Rosenzweig, Director of the Writing Center
Eoin Ryan, Preceptor in Expository Writing
Emily J. Shelton, Preceptor in Expository Writing
Lindsay M. Silver Cohen, Preceptor in Expository Writing
Rebecca Summerhayes, Preceptor in Expository Writing
Michelle Syba, Preceptor in Expository Writing
Joaquin Sebastian Terrones, Preceptor in Expository Writing
Adrienne Leigh Tierney, Preceptor in Expository Writing
Jane E. Unruie, Preceptor in Expository Writing
Kenneth J. Urban, Preceptor in Expository Writing
Aliza H. Watters, Preceptor in Expository Writing (on leave spring term)
William Conrad Weitzel, Preceptor in Expository Writing

For Undergraduates Only

Expository Writing 20 fulfills the basic requirement in Expository Writing, a requirement for all undergraduates in their first year of residence. The Expository Writing Program also offers two elective courses, Expos 10 and Expos 40. No Expository Writing courses have midterm or final examinations. For additional information on Expository Writing courses, see the Writing
Expository Writing 10

A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Expository Writing 10. Introduction to Expository Writing
Catalog Number: 6344 Enrollment: Limited to 10 students per section.
Members of the Department
Half course (fall term). Hours to be arranged.
Note: After taking Expository Writing 10, a student must pass Expository Writing 20 to meet the College’s Expository Writing requirement.

Expository Writing 10.001. Introduction to Expository Writing
Catalog Number: 77429 Enrollment: Limited to 10.
Patricia M. Bellanca
Half course (fall term). M., W., at 11.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Expository Writing 10.002. Introduction to Expository Writing
Catalog Number: 25907 Enrollment: Limited to 10.
Jonah M. Johnson
Half course (fall term). M., W., at 11.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Note: Expected to be given in 2013–14.

Expository Writing 10.003. Introduction to Expository Writing
Catalog Number: 92536 Enrollment: Limited to 10.
Karen L. Heath
Half course (fall term). Tu., Th., at 12.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in
individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.004. Introduction to Expository Writing**
Catalog Number: 41014 Enrollment: Limited to 10.
*Thomas R. Jehn*
Half course (fall term). M., W., at 1.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.005. Introduction to Expository Writing**
Catalog Number: 56121 Enrollment: Limited to 10.
*Kelsey W. McNiff*
Half course (fall term). Tu., Th., at 12.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.006. Introduction to Expository Writing**
Catalog Number: 71228 Enrollment: Limited to 10.
*Kelsey W. McNiff*
Half course (fall term). Tu., Th., at 1.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.007. Introduction to Expository Writing**
Catalog Number: 86335 Enrollment: Limited to 10.
*Jane A. Rosenzweig*
Half course (fall term). Tu., Th., at 11.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.008. Introduction to Expository Writing**
Catalog Number: 34813 Enrollment: Limited to 10.
*Instructor to be determined*
Half course (fall term). Tu., Th., at 12.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.009. Introduction to Expository Writing**
Catalog Number: 65027 Enrollment: Limited to 10.
Instructor to be determined
Half course (fall term). Tu., Th., at 1.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.010. Introduction to Expository Writing**
Catalog Number: 13505 Enrollment: Limited to 10.
Rebecca Summerhayas
Half course (fall term). Tu., Th., at 10.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.011. Introduction to Expository Writing**
Catalog Number: 80134 Enrollment: Limited to 10.
Rebecca Summerhayas
Half course (fall term). Tu., Th., at 11.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

**Expository Writing 10.012. Introduction to Expository Writing**
Catalog Number: 28612 Enrollment: Limited to 10.
Vernon Tad Davies
Half course (fall term). Tu., Th., at 12.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.
Expository Writing 10.013. Introduction to Expository Writing
Catalog Number: 95241 Enrollment: Limited to 10.
Vernon Tad Davies
Half course (fall term). Tu., Th., at 1.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Expository Writing 10.014. Introduction to Expository Writing
Catalog Number: 43719 Enrollment: Limited to 10.
William Conrad Weitzel
Half course (fall term). M., W., at 12.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Expository Writing 10.015. Introduction to Expository Writing
Catalog Number: 58826 Enrollment: Limited to 10.
William Conrad Weitzel
Half course (fall term). M., W., at 1.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

Expository Writing 10.016. Introduction to Expository Writing
Catalog Number: 84655 Enrollment: Limited to 10.
James P. Herron
Half course (fall term). M., W., at 11.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas, analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

[Expository Writing 10.017. Introduction to Expository Writing] - (New Course)
Catalog Number: 74635 Enrollment: Limited to 10.
Jonah M. Johnson
Half course (fall term). Hours to be arranged.
A rigorous, intensive elective that helps students prepare for the demands of college writing. In small classes, students work closely with instructors on developing and organizing ideas,
analyzing sources, and writing clear, engaging essays. Students also meet frequently in individual conferences with instructors to discuss their work. Assignments are based on sources from a range of disciplines and genres.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20**

An intensive seminar that aims to improve each student’s ability to discover and reason about evidence through the medium of essays. Each section focuses on a particular theme or topic, described on the Expos Website. All sections give students practice in formulating questions, analyzing both primary and secondary sources and properly acknowledging them, supporting arguments with strong and detailed evidence, and shaping clear, lively essays. All sections emphasize revision.

**Expository Writing 20. Expository Writing**

Catalog Number: 5518 Enrollment: Limited to 15 students per section.

*Members of the Department*

*Half course (fall term; repeated spring term). Hours to be arranged.*

*Note:* Students must pass one term of Expository Writing 20 to meet the College’s Expository Writing requirement.

**Expository Writing 20.001. Human Death and Disease**

Catalog Number: 53084 Enrollment: Limited to 15.

*Jerusha T. Achterberg*

*Half course (fall term). M., W., at 10.*

All humans, from every time and place, experience death and disease. In this course, we will examine selected topics surrounding the human experience with morbidity and mortality as approached in the biological sciences. Using historical and contemporary science source materials, including primary research articles and persuasive essays, we will explore biological processes of illness, behaviors and knowledge about mortality, and death as a mechanism of change.

**Expository Writing 20.002. Human Death and Disease**

Catalog Number: 68191 Enrollment: Limited to 15.

*Jerusha T. Achterberg*

*Half course (fall term). M., W., at 11.*

All humans, from every time and place, experience death and disease. In this course, we will examine selected topics surrounding the human experience with morbidity and mortality as approached in the biological sciences. Using historical and contemporary science source materials, including primary research articles and persuasive essays, we will explore biological processes of illness, behaviors and knowledge about mortality, and death as a mechanism of change.

**Expository Writing 20.003. Human Death and Disease**

Catalog Number: 16669 Enrollment: Limited to 15.
Jerusha T. Achterberg  
*Half course (spring term). M., W., at 10.*
All humans, from every time and place, experience infectious disease and death. In this course, we will examine the impact of selected infectious diseases as approached in the biological sciences and in global health. Students will also explore the relationship between human activity and disease risk and mortality. Evolutionary frameworks are used to explore biological processes of illness, and how human behaviors and knowledge about infection can affect these processes.

**Expository Writing 20.004. Human Death and Disease**  
Catalog Number: 83298 Enrollment: Limited to 15.  
Jerusha T. Achterberg  
*Half course (spring term). M., W., at 11.*  
All humans, from every time and place, experience infectious disease and death. In this course, we will examine the impact of selected infectious diseases as approached in the biological sciences and in global health. Students will also explore the relationship between human activity and disease risk and mortality. Evolutionary frameworks are used to explore biological processes of illness, and how human behaviors and knowledge about infection can affect these processes.

**[Expository Writing 20.005. Narrating the American Past]**  
Catalog Number: 40682 Enrollment: Limited to 15.  
Laura L. Adams  
*Half course (fall term). Hours to be arranged.*  
Explores how social memory shapes what it means to be an American by examining the public representation of the September 11 attack on the World Trade Center, the Trail of Tears, and a third event which students will select themselves. Students will write three essays in which they progressively develop their arguments about how and why these historical narratives are constructed, disputed, and ultimately, what they tell Americans about who they are today.  
*Note:* Expected to be given in 2013–14.

**[Expository Writing 20.006. Narrating the American Past]**  
Catalog Number: 49588 Enrollment: Limited to 15.  
Laura L. Adams  
*Half course (spring term). Hours to be arranged.*  
Explores how social memory shapes what it means to be an American by examining the public representation of the September 11 attack on the World Trade Center, the Trail of Tears, and a third event which students will select themselves. Students will write three essays in which they progressively develop their arguments about how and why these historical narratives are constructed, disputed, and ultimately, what they tell Americans about who they are today.  
*Note:* Expected to be given in 2013–14.

**[Expository Writing 20.007. Narrating the American Past]**  
Catalog Number: 64695 Enrollment: Limited to 15.  
Laura L. Adams  
*Half course (spring term). Hours to be arranged.*  
Explores how social memory shapes what it means to be an American by examining the public representation of the September 11 attack on the World Trade Center, the Trail of Tears, and a
third event which students will select themselves. Students will write three essays in which they progressively develop their arguments about how and why these historical narratives are constructed, disputed, and ultimately, what they tell Americans about who they are today. 

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.012. The Rise of Pop**  
Catalog Number: 77097 Enrollment: Limited to 15.  
*Kevin Brian Birmingham*  
*Half course (fall term). M., W., at 10.*  
The idea that there is a hierarchy separating high and low art extends as far back as Aristotle, but during the past fifty years American culture has depended upon destroying this hierarchy. This course examines what happens to art and society when the boundaries separating high and low art are gone. We will examine Thomas Pynchon, Andy Warhol, and *The Rocky Horror Picture Show* along with cultural theorists such as Adorno, Benjamin, Sontag, and Bakhtin.

**Expository Writing 20.013. The Rise of Pop**  
Catalog Number: 25575 Enrollment: Limited to 15.  
*Kevin Brian Birmingham*  
*Half course (spring term). M., W., at 10.*  
The idea that there is a hierarchy separating high and low art extends as far back as Aristotle, but during the past fifty years American culture has depended upon destroying this hierarchy. This course examines what happens to art and society when the boundaries separating high and low art are gone. We will examine Thomas Pynchon, Andy Warhol, and *The Rocky Horror Picture Show* along with cultural theorists such as Adorno, Benjamin, Sontag, and Bakhtin.

**Expository Writing 20.018. Representations of American Democracy and Government**  
Catalog Number: 70896 Enrollment: Limited to 15.  
*Vernon Tad Davies*  
*Half course (fall term). Hours to be arranged.*  
Beyond the abstraction of American democracy as government of, by and for the people, what can we glean about our definitions of American governance from historical and artistic representations of it? This course will examine what US democracy looks like when brought to life in campaign commercials, in the architecture of government buildings, and in conspiracy films. We will ask how these works shape our understanding of the possibilities and constraints of democratic action.  

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.019. Representations of American Democracy and Government**  
Catalog Number: 19374 Enrollment: Limited to 15.  
*Vernon Tad Davies*  
*Half course (fall term). Hours to be arranged.*  
Beyond the abstraction of American democracy as government of, by and for the people, what can we glean about our definitions of American governance from historical and artistic representations of it? This course will examine what US democracy looks like when brought to life in campaign commercials, in the architecture of government buildings, and in conspiracy films. We will ask how these works shape our understanding of the possibilities and constraints
of democratic action.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.020. Representations of American Democracy and Government**

Catalog Number: 86003 Enrollment: Limited to 15.

*Vernon Tad Davies*

*Half course (spring term). Tu., Th., at 12.*

Beyond the abstraction of American democracy as government of, by and for the people, what can we glean about our definitions of American governance from historical and artistic representations of it? This course will examine what US democracy looks like when brought to life in campaign commercials, in the architecture of government buildings, and in conspiracy films. We will ask how these works shape our understanding of the possibilities and constraints of democratic action.

**Expository Writing 20.021. Representations of American Democracy and Government**

Catalog Number: 34481 Enrollment: Limited to 15.

*Vernon Tad Davies*

*Half course (spring term). Tu., Th., at 1.*

Beyond the abstraction of American democracy as government of, by and for the people, what can we glean about our definitions of American governance from historical and artistic representations of it? This course will examine what US democracy looks like when brought to life in campaign commercials, in the architecture of government buildings, and in conspiracy films. We will ask how these works shape our understanding of the possibilities and constraints of democratic action.

**Expository Writing 20.034. Modern Cities in Crisis**

Catalog Number: 15878 Enrollment: Limited to 15.

*Elizabeth Greenspan*

*Half course (spring term). Hours to be arranged.*

This course explores the challenges and contradictions of urban life. We examine fictional and non-fictional accounts of ghettos and slums to investigate relationships between class, race, violence, the family, and politics. Our texts include the HBO series *The Wire*; an ethnography of the drug trade in NYC; and a journalistic account of the Mumbai slums. We explore the arguments these texts make about the problems plaguing cities, and discuss possible solutions.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.035. Modern Cities in Crisis**

Catalog Number: 82507 Enrollment: Limited to 15.

*Elizabeth Greenspan*

*Half course (spring term). Hours to be arranged.*

This course explores the challenges and contradictions of urban life. We examine fictional and non-fictional accounts of ghettos and slums to investigate relationships between class, race, violence, the family, and politics. Our texts include the HBO series *The Wire*; an ethnography of the drug trade in NYC; and a journalistic account of the Mumbai slums. We explore the arguments these texts make about the problems plaguing cities, and discuss possible solutions.

*Note:* Expected to be given in 2013–14.
[Expository Writing 20.036. Writing Culture]
Catalog Number: 30985 Enrollment: Limited to 15.
Gregory A. Harris
Half course (fall term). Hours to be arranged.
Our desires and perceptions take shape not just individually but through shared systems of meaning: culture. How can we see culture, though, when our own often seems transparently natural (like water to a fish, one anthropologist observed), and others’ intrinsically alien? Short answer: through encounter. With the aim of writing original cultural analysis of Harvard and other subjects, we’ll study anthropologists (Geertz, Rosaldo), social theorists (Williams, James), and other writers (McCarthy, Didion, Alexie).
Note: Expected to be given in 2013–14.

[Expository Writing 20.037. Writing Culture]
Catalog Number: 97614 Enrollment: Limited to 15.
Gregory A. Harris
Half course (fall term). Hours to be arranged.
Our desires and perceptions take shape not just individually but through shared systems of meaning: culture. How can we see culture, though, when our own often seems transparently natural (like water to a fish, one anthropologist observed), and others’ intrinsically alien? Short answer: through encounter. With the aim of writing original cultural analysis of Harvard and other subjects, we’ll study anthropologists (Geertz, Rosaldo), social theorists (Williams, James), and other writers (McCarthy, Didion, Alexie).
Note: Expected to be given in 2013–14.

[Expository Writing 20.038. Writing Culture]
Catalog Number: 46092 Enrollment: Limited to 15.
Gregory A. Harris
Half course (spring term). Hours to be arranged.
Our desires and perceptions take shape not just individually but through shared systems of meaning: culture. How can we see culture, though, when our own often seems transparently natural (like water to a fish, one anthropologist observed), and others’ intrinsically alien? Short answer: through encounter. With the aim of writing original cultural analysis of Harvard and other subjects, we’ll study anthropologists (Geertz, Rosaldo), social theorists (Williams, James), and other writers (McCarthy, Didion, Alexie).
Note: Expected to be given in 2013–14.

Expository Writing 20.046. Darwinian Dating
Catalog Number: 18583 Enrollment: Limited to 15.
Elissa Krakauer Jacobs
Half course (fall term). Tu., Th., at 10.
In this course we will examine patterns of human attraction, using an evolutionary perspective to better understand mate choice. In the first unit, we will explore the roles of biology versus culture in human behavior. Next, we will address female attraction and attempt to determine whether women prefer “nice guys” or “bad boys.” In the final unit, students will have an opportunity to undertake independent research as they explore the nature of male attraction.
**Expository Writing 20.047. Darwinian Dating**  
Catalog Number: 85212 Enrollment: Limited to 15.  
*Elissa Krakauer Jacobs*  
*Half course (fall term). Tu., Th., at 11.*  
In this course we will examine patterns of human attraction, using an evolutionary perspective to better understand mate choice. In the first unit, we will explore the roles of biology versus culture in human behavior. Next, we will address female attraction and attempt to determine whether women prefer “nice guys” or “bad boys.” In the final unit, students will have an opportunity to undertake independent research as they explore the nature of male attraction.  

**Expository Writing 20.048. Darwinian Dating**  
Catalog Number: 48797 Enrollment: Limited to 15.  
*Elissa Krakauer Jacobs*  
*Half course (spring term). Hours to be arranged.*  
In this course we will examine patterns of human attraction, using an evolutionary perspective to better understand mate choice. In the first unit, we will explore the roles of biology versus culture in human behavior. Next, we will address female attraction and attempt to determine whether women prefer “nice guys” or “bad boys.” In the final unit, students will have an opportunity to undertake independent research as they explore the nature of male attraction.  
*Note:* Expected to be given in 2013–14.  

**Expository Writing 20.049. Darwinian Dating**  
Catalog Number: 63904 Enrollment: Limited to 15.  
*Elissa Krakauer Jacobs*  
*Half course (spring term). Hours to be arranged.*  
In this course we will examine patterns of human attraction, using an evolutionary perspective to better understand mate choice. In the first unit, we will explore the roles of biology versus culture in human behavior. Next, we will address female attraction and attempt to determine whether women prefer “nice guys” or “bad boys.” In the final unit, students will have an opportunity to undertake independent research as they explore the nature of male attraction.  
*Note:* Expected to be given in 2013–14.  

**Expository Writing 20.059. Interpreting the Civil Rights Movement**  
Catalog Number: 57703 Enrollment: Limited to 15.  
*Ariane Mary Liazos*  
*Half course (fall term). Tu., Th., at 1.*  
According to civil rights scholar Charles Payne, "Our understanding of social change, our conceptions of leadership, our understanding of the possibilities of interracial cooperation are all affected by how we remember the movement." In this seminar, we investigate the work of remembering and interpreting the mid-twentieth-century civil rights movement. We consider both popular and scholarly accounts, and we focus on the use of speeches, memoirs, and newspapers to reconstruct the events of the past.  

**Expository Writing 20.060. Interpreting the Civil Rights Movement**  
Catalog Number: 21288 Enrollment: Limited to 15.  
*Ariane Mary Liazos*
According to civil rights scholar Charles Payne, "Our understanding of social change, our conceptions of leadership, our understanding of the possibilities of interracial cooperation are all affected by how we remember the movement." In this seminar, we investigate the work of remembering and interpreting the mid-twentieth-century civil rights movement. We consider both popular and scholarly accounts, and we focus on the use of speeches, memoirs, and newspapers to reconstruct the events of the past.

**Note:** Expected to be given in 2013–14.

**Expository Writing 20.061. Interpreting the Civil Rights Movement**
Catalog Number: 87917 Enrollment: Limited to 15.
Ariane Mary Liazos

Half course (fall term). Hours to be arranged.

The civil rights movement, according to civil rights scholar Charles Payne, "continues to exercise a considerable hold on the American imagination. Our understanding of social change, our conceptions of leadership, our understanding of the possibilities of interracial cooperation are all affected by how we remember the movement." In this seminar, we investigate the work of remembering and interpreting the civil rights movement of the mid-twentieth century. We consider both popular and scholarly renditions, and we focus on the use of speeches, accounts by participants, and newspaper articles to reconstruct the events of the past.

**Expository Writing 20.062. Interpreting the Civil Rights Movement**
Catalog Number: 36395 Enrollment: Limited to 15.
Ariane Mary Liazos

Half course (spring term). Tu., Th., at 1.

The civil rights movement, according to civil rights scholar Charles Payne, "continues to exercise a considerable hold on the American imagination. Our understanding of social change, our conceptions of leadership, our understanding of the possibilities of interracial cooperation are all affected by how we remember the movement." In this seminar, we investigate the work of remembering and interpreting the civil rights movement of the mid-twentieth century. We consider both popular and scholarly renditions, and we focus on the use of speeches, accounts by participants, and newspaper articles to reconstruct the events of the past.

**Expository Writing 20.063. Gothic Fiction**
Catalog Number: 51502 Enrollment: Limited to 15.
Michele C. Martinez

Half course (fall term). Tu., Th., at 10.

This course explores the meaning and function of Gothic literature, a genre characterized by secrecy, perversion, madness, and death. In our first unit, short stories—of various centuries and nations—will allow us to develop a working definition of Gothic. In unit two we’ll interpret Jane Austen’s Gothic spoof *Northanger Abbey* in the context of both popular fiction and eighteenth-century debates about reading. The third unit introduces research methods that focus on the works of Edgar Allan Poe.

**Expository Writing 20.064. Gothic Fiction**
Catalog Number: 66609 Enrollment: Limited to 15.
Michele C. Martinez  
Half course (spring term). Tu., Th., at 11.
This course explores the meaning and function of Gothic literature, a genre characterized by secrecy, perversion, madness, and death. In our first unit, short stories—of various centuries and nations—will allow us to develop a working definition of Gothic. In unit two we’ll interpret Jane Austen’s Gothic spoof *Northanger Abbey* in the context of both popular fiction and eighteenth-century debates about reading. The third unit introduces research methods that focus on the works of Edgar Allan Poe.

**Expository Writing 20.065. Gothic Fiction**
Catalog Number: 15087 Enrollment: Limited to 15.  
Michele C. Martinez  
Half course (spring term). Tu., Th., at 12.
This course explores the meaning and function of Gothic literature, a genre characterized by secrecy, perversion, madness, and death. In our first unit, short stories—of various centuries and nations—will allow us to develop a working definition of Gothic. In unit two we’ll interpret Jane Austen’s Gothic spoof *Northanger Abbey* in the context of both popular fiction and eighteenth-century debates about reading. The third unit introduces research methods that focus on the works of Edgar Allan Poe.

[Expository Writing 20.066. Cross-Cultural Contact Zones]
Catalog Number: 81716 Enrollment: Limited to 15.  
Srilata Mukherjee  
Half course (fall term). Hours to be arranged.  
How does fiction represent cross-cultural encounters between Eurocentric and non-Eurocentric worlds? In what ways do the specific social and political circumstances under which these contacts occur influence the nature of the cross-cultural encounters? Do issues of power, class, and gender function differently in cross-cultural environments for the racial groups involved than they would within a single culture? In exploring literature about three kinds of cross-cultural encounters-transient, colonial/postcolonial, and immigrant—we’ll pose such resonant questions.  
*Note:* Expected to be given in 2013–14.

[Expository Writing 20.067. Cross-Cultural Contact Zones]
Catalog Number: 30194 Enrollment: Limited to 15.
Srilata Mukherjee  
Half course (fall term). Hours to be arranged.  
How does fiction represent cross-cultural encounters between Eurocentric and non-Eurocentric worlds? In what ways do the specific social and political circumstances under which these contacts occur influence the nature of the cross-cultural encounters? Do issues of power, class, and gender function differently in cross-cultural environments for the racial groups involved than they would within a single culture? In exploring literature about three kinds of cross-cultural encounters-transient, colonial/postcolonial, and immigrant—we’ll pose such resonant questions.  
*Note:* Expected to be given in 2013–14.

[Expository Writing 20.068. Cross-Cultural Contact Zones]
Catalog Number: 96823 Enrollment: Limited to 15.
Srilata Mukherjee  
**Half course (spring term). Hours to be arranged.**

How does fiction represent cross-cultural encounters between Eurocentric and non-Eurocentric worlds? In what ways do the specific social and political circumstances under which these contacts occur influence the nature of the cross-cultural encounters? Do issues of power, class, and gender function differently in cross-cultural environments for the racial groups involved than they would within a single culture? In exploring literature about three kinds of cross-cultural encounters—transient, colonial/postcolonial, and immigrant—we’ll pose such resonant questions.

*Note:* Expected to be given in 2013–14.

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**[Expository Writing 20.069. Cross-Cultural Contact Zones]**

Catalog Number: 45301 Enrollment: Limited to 15.

Srilata Mukherjee  
**Half course (spring term). Hours to be arranged.**

How does fiction represent cross-cultural encounters between Eurocentric and non-Eurocentric worlds? In what ways do the specific social and political circumstances under which these contacts occur influence the nature of the cross-cultural encounters? Do issues of power, class, and gender function differently in cross-cultural environments for the racial groups involved than they would within a single culture? In exploring literature about three kinds of cross-cultural encounters—transient, colonial/postcolonial, and immigrant—we’ll pose such resonant questions.

*Note:* Expected to be given in 2013–14.

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**Expository Writing 20.070. The Ethics of Human Experimentation**

Catalog Number: 97946 Enrollment: Limited to 15.

Donna L. Mumme  
**Half course (fall term). Tu., Th., at 10.**

To learn about human biology and behavior, researchers often use people as research subjects. Although such research has produced many social benefits, it sometimes comes at a cost to study participants. In this course, you will weigh the costs and benefits of a controversial psychological study, take a psychological approach to understanding why unethical research practices occur, and consider how research can be done to maximize its impact while minimizing the risks to human participants.

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**Expository Writing 20.071. The Ethics of Human Experimentation**

Catalog Number: 46424 Enrollment: Limited to 15.

Donna L. Mumme  
**Half course (fall term). Tu., Th., at 11.**

To learn about human biology and behavior, researchers often use people as research subjects. Although such research has produced many social benefits, it sometimes comes at a cost to study participants. In this course, you will weigh the costs and benefits of a controversial psychological study, take a psychological approach to understanding why unethical research practices occur, and consider how research can be done to maximize its impact while minimizing the risks to human participants.

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**[Expository Writing 20.072. The Ethics of Human Experimentation]**

Catalog Number: 61531 Enrollment: Limited to 15.
Donna L. Mumme  
*Half course (spring term). Hours to be arranged.*

To learn about human biology and behavior, researchers often use people as research subjects. Although such research has produced many social benefits, it sometimes comes at a cost to study participants. In this course, you will weigh the costs and benefits of a controversial psychological study, take a psychological approach to understanding why unethical research practices occur, and consider how research can be done to maximize its impact while minimizing the risks to human participants.

*Note:* Expected to be given in 2013–14.

[Expository Writing 20.073. The Ethics of Human Experimentation]
Catalog Number: 10009 Enrollment: Limited to 15.

Donna L. Mumme  
*Half course (spring term). Hours to be arranged.*

To learn about human biology and behavior, researchers often use people as research subjects. Although such research has produced many social benefits, it sometimes comes at a cost to study participants. In this course, you will weigh the costs and benefits of a controversial psychological study, take a psychological approach to understanding why unethical research practices occur, and consider how research can be done to maximize its impact while minimizing the risks to human participants.

*Note:* Expected to be given in 2013–14.

Expository Writing 20.078. Jewish Identity in American Culture
Catalog Number: 54207 Enrollment: Limited to 15.

Jane A. Rosenzweig  
*Half course (spring term). Tu., Th., at 11.*

This course will examine representations of Jews in American culture and the evolution of Jewish-American culture since World War II, as well as how shifts in the cultural conversation about minorities in America have affected our understanding of Jewish identity. We will question how recent works of literature, art, film, and television challenge and reinforce Jewish stereotypes, and how they continue to shape our ideas about assimilation, the Holocaust, ethnicity, and religious practice in America.

Expository Writing 20.079. Tales of Murder
Catalog Number: 69314 Enrollment: Limited to 15.

Emily J. Shelton  
*Half course (fall term). Tu., Th., at 10.*

The Sixth Commandment is succinct: "Thou shalt not commit murder." And yet descriptions of murder feature prominently in Western literature and culture. Why are we so engaged by the telling of these grim tales, and what is at stake in their being told? By analyzing the challenges of shaping coherent narratives around incomprehensible acts, this course examines the ethical and aesthetic implications of mediating a phenomenon as elusive, and terrifyingly actual, as murder.

Expository Writing 20.080. Tales of Murder
Catalog Number: 17792 Enrollment: Limited to 15.

Emily J. Shelton
Half course (fall term). Tu., Th., at 11.

The Sixth Commandment is succinct: "Thou shalt not commit murder." And yet descriptions of murder feature prominently in Western literature and culture. Why are we so engaged by the telling of these grim tales, and what is at stake in their being told? By analyzing the challenges of shaping coherent narratives around incomprehensible acts, this course examines the ethical and aesthetic implications of mediating a phenomenon as elusive, and terrifyingly actual, as murder.

**Expository Writing 20.081. Tales of Murder**

Catalog Number: 84421 Enrollment: Limited to 15.

*Emily J. Shelton*

Half course (spring term). Tu., Th., at 10.

The Sixth Commandment is succinct: "Thou shalt not commit murder." And yet descriptions of murder feature prominently in Western literature and culture. Why are we so engaged by the telling of these grim tales, and what is at stake in their being told? By analyzing the challenges of shaping coherent narratives around incomprehensible acts, this course examines the ethical and aesthetic implications of mediating a phenomenon as elusive, and terrifyingly actual, as murder.

**Expository Writing 20.082. Tales of Murder**

Catalog Number: 32899 Enrollment: Limited to 15.

*Emily J. Shelton*

Half course (spring term). Tu., Th., at 11.

The Sixth Commandment is succinct: "Thou shalt not commit murder." And yet descriptions of murder feature prominently in Western literature and culture. Why are we so engaged by the telling of these grim tales, and what is at stake in their being told? By analyzing the challenges of shaping coherent narratives around incomprehensible acts, this course examines the ethical and aesthetic implications of mediating a phenomenon as elusive, and terrifyingly actual, as murder.

**Expository Writing 20.083. Poetry at the Limit**

Catalog Number: 99528 Enrollment: Limited to 15.

*Instructor to be determined*

Half course (spring term). Tu., Th., at 11.

Poetry has long been a space for solace and contemplation, particularly throughout the wars of the twentieth century. How has poetry changed in the past 100 years as it attempts to apprehend atrocity, genocide and total war? We read poems that describe ruthless violence, that respond to works of art, and that address contemporary refugee camps and HIV hospices. In such forlorn environments, can poetry remain “poetic”?

**Expository Writing 20.084. Urban America**

Catalog Number: 76638 Enrollment: Limited to 15.

*Lindsay M. Silver Cohen*

Half course (fall term). M., W., at 12.

This course addresses questions about the past and present urban experience by analyzing American cities from various disciplinary perspectives. Unit I hones critical skills through close readings of *How the Other Half Lives*, an exposé of late nineteenth-century New York. Unit II emphasizes the importance of context through analysis of the play, *A Raisin in the Sun* with companion texts. Unit III teaches the fundamentals of research through independent projects on
our local, urban environment: Cambridge, Massachusetts. Together, these units teach the mechanics of academic writing while providing insight into the problems and promise of the American city over time.

**Expository Writing 20.085. Urban America**
Catalog Number: 25116 Enrollment: Limited to 15.
*Lindsay M. Silver Cohen*
*Half course (fall term). M., W., at 1.*
This course addresses questions about the past and present urban experience by analyzing American cities from various disciplinary perspectives. Unit I hones critical skills through close readings of *How the Other Half Lives*, an exposé of late nineteenth-century New York. Unit II emphasizes the importance of context through analysis of the play, *A Raisin in the Sun* with companion texts. Unit III teaches the fundamentals of research through independent projects on our local, urban environment: Cambridge, Massachusetts. Together, these units teach the mechanics of academic writing while providing insight into the problems and promise of the American city over time.

**Expository Writing 20.086. Urban America**
Catalog Number: 48006 Enrollment: Limited to 15.
*Lindsay M. Silver Cohen*
*Half course (spring term). M., W., at 12.*
This course addresses questions about the past and present urban experience by analyzing American cities from various disciplinary perspectives. Unit I hones critical skills through close readings of *How the Other Half Lives*, an exposé of late nineteenth-century New York. Unit II emphasizes the importance of context through analysis of the play, *A Raisin in the Sun* with companion texts. Unit III teaches the fundamentals of research through independent projects on our local, urban environment: Cambridge, Massachusetts. Together, these units teach the mechanics of academic writing while providing insight into the problems and promise of the American city over time.

**Expository Writing 20.097. HIV/AIDS in Culture**
Catalog Number: 50711 Enrollment: Limited to 15.
*Joaquin Sebastian Terrones*
*Half course (fall term). M., W., at 10.*
Perhaps more than any other event in the last quarter of the twentieth century, the AIDS crisis condensed or crystallized cultural anxieties about the body, identity, and difference. In this course, we will examine the cultural response to HIV/AIDS in North and Latin America through fiction, poetry, and visual art from the pandemic’s first fifteen years. No knowledge of Spanish or Portuguese is necessary; all materials will be available in English.

**Expository Writing 20.098. HIV/AIDS in Culture**
Catalog Number: 65818 Enrollment: Limited to 15.
*Joaquin Sebastian Terrones*
*Half course (fall term). M., W., at 11.*
Perhaps more than any other event in the last quarter of the twentieth century, the AIDS crisis condensed or crystallized cultural anxieties about the body, identity, and difference. In this
course, we will examine the cultural response to HIV/AIDS in North and Latin America through fiction, poetry, and visual art from the pandemic’s first fifteen years. No knowledge of Spanish or Portuguese is necessary; all materials will be available in English.

**Expository Writing 20.099. HIV/AIDS in Culture**
Catalog Number: 14296 Enrollment: Limited to 15.
Joaquin Sebastian Terrones
*Half course (spring term). M., W., at 10.*
Perhaps more than any other event in the last quarter of the twentieth century, the AIDS crisis condensed or crystallized cultural anxieties about the body, identity, and difference. In this course, we will examine the cultural response to HIV/AIDS in North and Latin America through fiction, poetry, and visual art from the pandemic’s first fifteen years. No knowledge of Spanish or Portuguese is necessary; all materials will be available in English.

**Expository Writing 20.100. HIV/AIDS in Culture**
Catalog Number: 80925 Enrollment: Limited to 15.
Joaquin Sebastian Terrones
*Half course (spring term). M., W., at 11.*
Perhaps more than any other event in the last quarter of the twentieth century, the AIDS crisis condensed or crystallized cultural anxieties about the body, identity, and difference. In this course, we will examine the cultural response to HIV/AIDS in North and Latin America through fiction, poetry, and visual art from the pandemic’s first fifteen years. No knowledge of Spanish or Portuguese is necessary; all materials will be available in English.

**Expository Writing 20.101. The Voice of Authority**
Catalog Number: 29403 Enrollment: Limited to 15.
Jane E. Unrue
*Half course (fall term). M., W., at 10.*
What is authority? First, we will read the controversial *One Flew Over the Cuckoo’s Nest,* closely investigating that explosive novel’s complex treatment of authority. Next, we will read and meet two "at-risk" writers, comparing and analyzing effects and expressions of artistic challenges to governmental and cultural authority. Finally, our ongoing inquiry into authority will shape research topics as we investigate issues arising out of authority’s relation to education, rhetorical strategy, politics, human rights, and art.

**Expository Writing 20.102. The Voice of Authority**
Catalog Number: 96032 Enrollment: Limited to 15.
Jane E. Unrue
*Half course (fall term). M., W., at 11.*
What is authority? First, we will read the controversial *One Flew Over the Cuckoo’s Nest,* closely investigating that explosive novel’s complex treatment of authority. Next, we will read and meet two "at-risk" writers, comparing and analyzing effects and expressions of artistic challenges to governmental and cultural authority. Finally, our ongoing inquiry into authority will shape research topics as we investigate issues arising out of authority’s relation to education, rhetorical strategy, politics, human rights, and art.
**Expository Writing 20.103. The Voice of Authority**  
Catalog Number: 59617 Enrollment: Limited to 15.  
*Jane E. Unrue*  
*Half course (spring term). M., W., at 10.*  
What is authority? First, we will read the controversial *One Flew Over the Cuckoo’s Nest*, closely investigating that explosive novel’s complex treatment of authority. Next, we will read and meet two “at-risk” writers, comparing and analyzing effects and expressions of artistic challenges to governmental and cultural authority. Finally, our ongoing inquiry into authority will shape research topics as we investigate issues arising out of authority’s relation to education, rhetorical strategy, politics, human rights, and art.

**Expository Writing 20.104. The Voice of Authority**  
Catalog Number: 74724 Enrollment: Limited to 15.  
*Jane E. Unrue*  
*Half course (spring term). M., W., at 11.*  
What is authority? First, we will read the controversial *One Flew Over the Cuckoo’s Nest*, closely investigating that explosive novel’s complex treatment of authority. Next, we will read and meet two “at-risk” writers, comparing and analyzing effects and expressions of artistic challenges to governmental and cultural authority. Finally, our ongoing inquiry into authority will shape research topics as we investigate issues arising out of authority’s relation to education, rhetorical strategy, politics, human rights, and art.

**Expository Writing 20.105. Contemporary Theatre**  
Catalog Number: 23202 Enrollment: Limited to 15.  
*Kenneth J. Urban*  
*Half course (fall term). M., W., at 11.*  
Since the 1950s, theatre has refused to shy away from controversial issues, provoking audiences to reconsider their beliefs and re-imagine the world. This course will grapple with the plays of influential and provocative playwrights from the past five decades, and debate issues of politics, ethics, race, and sexuality. Playwrights will include Harold Pinter, Tennessee Williams, Paula Vogel, Tony Kushner, Samuel Beckett, and Sarah Kane.

**Expository Writing 20.106. Contemporary Theatre**  
Catalog Number: 89831 Enrollment: Limited to 15.  
*Kenneth J. Urban*  
*Half course (fall term). M., W., at 12.*  
Since the 1950s, theatre has refused to shy away from controversial issues, provoking audiences to reconsider their beliefs and re-imagine the world. This course will grapple with the plays of influential and provocative playwrights from the past five decades, and debate issues of politics, ethics, race, and sexuality. Playwrights will include Harold Pinter, Tennessee Williams, Paula Vogel, Tony Kushner, Samuel Beckett, and Sarah Kane.

**Expository Writing 20.113. Into the Wild**  
Catalog Number: 47215 Enrollment: Limited to 15.  
*William Conrad Weitzel*  
*Half course (spring term). M., W., at 1.*
What is wilderness? Do you have to explore wilderness to care about it? Who enters the wilderness and why? We will look at expeditions into the Kalahari Desert, remote Alaska, and the central African and Amazon rainforests and examine the place of expeditionary culture in current dilemmas about global wilderness. The course will include films, websites, periodicals, and blogs, paying particular attention to such threatened biomes as the Congolese Basin and Guyana Shield as domains of conspicuous urgency.

**Expository Writing 20.114. Into the Wild**

Catalog Number: 62322 Enrollment: Limited to 15.

*William Conrad Weitzel*

*Half course (spring term). M., W., at 2.*

What is wilderness? Do you have to explore wilderness to care about it? Who enters the wilderness and why? We will look at expeditions into the Kalahari Desert, remote Alaska, and the central African and Amazon rainforests and examine the place of expeditionary culture in current dilemmas about global wilderness. The course will include films, websites, periodicals, and blogs, paying particular attention to such threatened biomes as the Congolese Basin and Guyana Shield as domains of conspicuous urgency.

**Expository Writing 20.119. Family Matters**

Catalog Number: 34354 Enrollment: Limited to 15.

*Aliza H. Watters*

*Half course (fall term). Tu., Th., at 1.*

This course explores diverse examples of the family narrative, from origin stories to coming-of-age tales to contemporary journalistic, political, or sociological writing which often shapes larger narratives about identity politics and the "matters of family" in our society. Readings range from the Bible to Batman to Obama and will self-consciously question how we understand ourselves as being both apart from our families and a part of them.

**Expository Writing 20.120. Family Matters**

Catalog Number: 49461 Enrollment: Limited to 15.

*Aliza H. Watters*

*Half course (fall term). Tu., Th., at 2.*

This course explores diverse examples of the family narrative, from origin stories to coming-of-age tales to contemporary journalistic, political, or sociological writing which often shapes larger narratives about identity politics and the "matters of family" in our society. Readings range from the Bible to Batman to Obama and will self-consciously question how we understand ourselves as being both apart from our families and a part of them.

**Expository Writing 20.121. Family Matters**

Catalog Number: 64568 Enrollment: Limited to 15.

*Aliza H. Watters*

*Half course (spring term). Hours to be arranged.*

This course explores diverse examples of the family narrative, from origin stories to coming-of-age tales to contemporary journalistic, political, or sociological writing which often shapes larger narratives about identity politics and the "matters of family" in our society. Readings range from the Bible to Batman to Obama and will self-consciously question how we understand ourselves
as being both apart from our families and a part of them.
*Note:* Expected to be given in 2013–14.

**[Expository Writing 20.122. Family Matters]**
Catalog Number: 13046 Enrollment: Limited to 15.
*Aliza H. Watters*
*Half course (spring term). Hours to be arranged.*
This course explores diverse examples of the family narrative, from origin stories to coming-of-age tales to contemporary journalistic, political, or sociological writing which often shapes larger narratives about identity politics and the "matters of family" in our society. Readings range from the Bible to Batman to Obama and will self-consciously question how we understand ourselves as being both apart from our families and a part of them.
*Note:* Expected to be given in 2013–14.

**Expository Writing 20.123. Urban America**
Catalog Number: 72556 Enrollment: Limited to 15.
*Lindsay M. Silver Cohen*
*Half course (spring term). M., W., at 1.*
This course addresses questions about the past and present urban experience by analyzing American cities from various disciplinary perspectives. Unit I hones critical skills through close readings of *How the Other Half Lives*, an exposé of late nineteenth-century New York. Unit II emphasizes the importance of context through analysis of the play, *A Raisin in the Sun* with companion texts. Unit III teaches the fundamentals of research through independent projects on our local, urban environment: Cambridge, Massachusetts. Together, these units teach the mechanics of academic writing while providing insight into the problems and promise of the American city over time.

**Expository Writing 20.125. Obsession**
Catalog Number: 15575 Enrollment: Limited to 15.
*Matthew T. Levay*
*Half course (fall term). M., W., at 9.*
This course explores the cultural representation of obsession - in film, literature, and psychoanalytic case histories - asking how artistic accounts of aberrant emotions, compulsions, and habits might intersect with or diverge from scientific accounts of obsession and its potential manifestations. Under what conditions is obsession considered a virtue, and when does it become pathological? What can a study of obsession reveal about our conceptions of normality, attachment, perfectionism, and paranoia, and their place in contemporary society?

**Expository Writing 20.126. Obsession**
Catalog Number: 82204 Enrollment: Limited to 15.
*Matthew T. Levay*
*Half course (fall term). M., W., at 10.*
This course explores the cultural representation of obsession - in film, literature, and psychoanalytic case histories - asking how artistic accounts of aberrant emotions, compulsions, and habits might intersect with or diverge from scientific accounts of obsession and its potential manifestations. Under what conditions is obsession considered a virtue, and when does it become...
pathological? What can a study of obsession reveal about our conceptions of normality, attachment, perfectionism, and paranoia, and their place in contemporary society?

**Expository Writing 20.127. Obsession**  
Catalog Number: 30682 Enrollment: Limited to 15.  
Matthew T. Levay  
*Half course (spring term). M., W., at 9.*  
This course explores the cultural representation of obsession - in film, literature, and psychoanalytic case histories - asking how artistic accounts of aberrant emotions, compulsions, and habits might intersect with or diverge from scientific accounts of obsession and its potential manifestations. Under what conditions is obsession considered a virtue, and when does it become pathological? What can a study of obsession reveal about our conceptions of normality, attachment, perfectionism, and paranoia, and their place in contemporary society?

**Expository Writing 20.128. Obsession**  
Catalog Number: 97311 Enrollment: Limited to 15.  
Matthew T. Levay  
*Half course (spring term). M., W., at 10.*  
This course explores the cultural representation of obsession - in film, literature, and psychoanalytic case histories - asking how artistic accounts of aberrant emotions, compulsions, and habits might intersect with or diverge from scientific accounts of obsession and its potential manifestations. Under what conditions is obsession considered a virtue, and when does it become pathological? What can a study of obsession reveal about our conceptions of normality, attachment, perfectionism, and paranoia, and their place in contemporary society?

**Expository Writing 20.129. Contemporary Theatre**  
Catalog Number: 45789 Enrollment: Limited to 15.  
Kenneth J. Urban  
*Half course (spring term). M., W., at 11.*  
Since the 1950s, theatre has refused to shy away from controversial issues, provoking audiences to reconsider their beliefs and re-imagine the world. This course will grapple with the plays of influential and provocative playwrights from the past five decades, and debate issues of politics, ethics, race, and sexuality. Playwrights will include Harold Pinter, Tennessee Williams, Paula Vogel, Tony Kushner, Samuel Beckett, and Sarah Kane.

**Expository Writing 20.130. Contemporary Theatre**  
Catalog Number: 60896 Enrollment: Limited to 15.  
Kenneth J. Urban  
*Half course (spring term). M., W., at 12.*  
Since the 1950s, theatre has refused to shy away from controversial issues, provoking audiences to reconsider their beliefs and re-imagine the world. This course will grapple with the plays of influential and provocative playwrights from the past five decades, and debate issues of politics, ethics, race, and sexuality. Playwrights will include Harold Pinter, Tennessee Williams, Paula Vogel, Tony Kushner, Samuel Beckett, and Sarah Kane.
**Expository Writing 20.131. Philosophy of the State**  
Catalog Number: 31014  
*Owen Chen*  
*Half course (fall term). Tu., Th., at 10.*  
This course inquires into the origin and nature of the state, its forms and functions, its duties and powers in connection with its members, and its ethical implications. Readings to be discussed and written on are taken from Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Mill, and Marx. Throughout the course, students adjudicate between different conceptions of the state and their ends, and examine the source of power of the state.

**Expository Writing 20.132. Philosophy of the State**  
Catalog Number: 22108 Enrollment: Limited to 15.  
*Owen Chen*  
*Half course (fall term). Tu., Th., at 11.*  
This course inquires into the origin and nature of the state, its forms and functions, its duties and powers in connection with its members, and its ethical implications. Readings to be discussed and written on are taken from Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Mill, and Marx. Throughout the course, students adjudicate between different conceptions of the state and their ends, and examine the source of power of the state.

**Expository Writing 20.133. Philosophy of the State**  
Catalog Number: 88737 Enrollment: Limited to 15.  
*Owen Chen*  
*Half course (spring term). Tu., Th., at 10.*  
This course inquires into the origin and nature of the state, its forms and functions, its duties and powers in connection with its members, and its ethical implications. Readings to be discussed and written on are taken from Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Mill, and Marx. Throughout the course, students adjudicate between different conceptions of the state and their ends, and examine the source of power of the state.

**Expository Writing 20.134. Philosophy of the State**  
Catalog Number: 46121 Enrollment: Limited to 15.  
*Owen Chen*  
*Half course (spring term). Tu., Th., at 11.*  
This course inquires into the origin and nature of the state, its forms and functions, its duties and powers in connection with its members, and its ethical implications. Readings to be discussed and written on are taken from Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, Mill, and Marx. Throughout the course, students adjudicate between different conceptions of the state and their ends, and examine the source of power of the state.

[*Expository Writing 20.135. Art & the Nude*]  
Catalog Number: 21317 Enrollment: Limited to 15.  
*Justine Renee De Young*  
*Half course (fall term). M., W., at 10.*  
This course explores how the representation of the nude in modern art broke with the past and fundamentally reshaped the cultural landscape of the nineteenth and twentieth centuries. Taught
in conjunction with the "Degas and the Nude" exhibition at the Museum of Fine Arts, we first consider the tradition of the flawless goddess, how artists like Manet, Cézanne, Matisse and Picasso transgressed it, and, finally, how contemporary artists continue to radically transform the nude today.

*Note:* Expected to be given in 2013–14.

[**Expository Writing 20.136. Art & the Nude**]
Catalog Number: 87946 Enrollment: Limited to 15.
Justine Renee De Young
Half course (fall term). Hours to be arranged.
This course explores how the representation of the nude in modern art broke with the past and fundamentally reshaped the cultural landscape of the nineteenth and twentieth centuries. Taught in conjunction with the "Degas and the Nude" exhibition at the Museum of Fine Arts, we first consider the tradition of the flawless goddess, how artists like Manet, Cézanne, Matisse and Picasso transgressed it, and, finally, how contemporary artists continue to radically transform the nude today.

*Note:* Expected to be given in 2013–14.

[**Expository Writing 20.137. Art & the Nude**]
Catalog Number: 36424 Enrollment: Limited to 15.
Justine Renee De Young
Half course (spring term). Hours to be arranged.
This course explores how the representation of the nude in modern art broke with the past and fundamentally reshaped the cultural landscape of the nineteenth and twentieth centuries. Taught in conjunction with the "Degas and the Nude" exhibition at the Museum of Fine Arts, we first consider the tradition of the flawless goddess, how artists like Manet, Cézanne, Matisse and Picasso transgressed it, and, finally, how contemporary artists continue to radically transform the nude today.

*Note:* Expected to be given in 2013–14.

[**Expository Writing 20.138. Art & the Nude**]
Catalog Number: 51531 Enrollment: Limited to 15.
Justine Renee De Young
Half course (spring term). Hours to be arranged.
This course explores how the representation of the nude in modern art broke with the past and fundamentally reshaped the cultural landscape of the nineteenth and twentieth centuries. Taught in conjunction with the "Degas and the Nude" exhibition at the Museum of Fine Arts, we first consider the tradition of the flawless goddess, how artists like Manet, Cézanne, Matisse and Picasso transgressed it, and, finally, how contemporary artists continue to radically transform the nude today.

*Note:* Expected to be given in 2013–14.

[**Expository Writing 20.139. The Experience of Class**]
Catalog Number: 70466 Enrollment: Limited to 15.
James P. Herron
Half course (fall term). Tu., Th., at 12.
This course explores the subjective experience of social class in the U.S. from an ethnographic perspective. We will examine how members of the working and professional classes define themselves and view the classes above and below them. We will focus in particular on how class position influences beliefs about work, achievement, and taste. We will also consider the role of elite educational institutions such as Harvard in shaping the class system.

Note: Expected to be given in 2013–14.

**Expository Writing 20.140. The Experience of Class**
Catalog Number: 18944 Enrollment: Limited to 15.
*James P. Herron*

*Half course (spring term). Tu., Th., at 11.*

This course explores the subjective experience of social class in the U.S. from an ethnographic perspective. We will examine how members of the working and professional classes define themselves and view the classes above and below them. We will focus in particular on how class position influences beliefs about work, achievement, and taste. We will also consider the role of elite educational institutions such as Harvard in shaping the class system.

**Expository Writing 20.141. Portraits of Madness**
Catalog Number: 68425 Enrollment: Limited to 15.
*Karen L. Heath*

*Half course (spring term). Tu., Th., at 12.*

Writers and filmmakers have long been fascinated by the artistic challenge of representing madness. What can those portraits tell us about the relationship of illness and identity, the ease of losing touch with rationality, the nature of the mind, and our own relative sanity? We will study Susanna Kaysen’s memoir *Girl, Interrupted;* Patrick McGrath’s gothic novel *Spider* and its film adaptation; and the films *Donnie Darko, The Hours,* and *The Silence of the Lambs.*

**Expository Writing 20.142. Jane Austen, Then and Now**
Catalog Number: 16903 Enrollment: Limited to 15.
*Tess O’Toole*

*Half course (fall term). M., W., at 11.*

This course considers Austen in her own historical context and ours, and as an author whose importance lies both inside and outside the university. In our first unit, we’ll undertake a close reading of *Persuasion* in order to assess Austen’s analysis of British society at a transitional moment in its history; in unit 2 we’ll consider how film and television adaptations have reinvented her best known novel, *Pride and Prejudice,* for a different historical moment, and in unit 3 students will engage with Austen scholarship by writing a research paper on an Austen novel or film adaption of their choice.

**[Expository Writing 20.143. Jane Austen, Then and Now]**
Catalog Number: 83532 Enrollment: Limited to 15.
*Tess O’Toole*

*Half course (fall term). Hours to be arranged.*

This course considers Austen in her own historical context and ours, and as an author whose importance lies both inside and outside the university. In our first unit, we’ll undertake a close reading of *Persuasion* in order to assess Austen’s analysis of British society at a transitional moment in its history; in unit 2 we’ll consider how film and television adaptations have reinvented her best known novel, *Pride and Prejudice,* for a different historical moment, and in unit 3 students will engage with Austen scholarship by writing a research paper on an Austen novel or film adaption of their choice.
moment in its history; in unit 2 we’ll consider how film and television adaptations have reinvented her best known novel, *Pride and Prejudice*, for a different historical moment, and in unit 3 students will engage with Austen scholarship by writing a research paper on an Austen novel or film adaption of their choice.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.144. Jane Austen, Then and Now**  
Catalog Number: 98639 Enrollment: Limited to 15.  
*Tess O’Toole*  
*Half course (spring term). M., W., at 12.*  
This course considers Austen in her own historical context and ours, and as an author whose importance lies both inside and outside the university. In our first unit, we’ll undertake a close reading of *Persuasion* in order to assess Austen’s analysis of British society at a transitional moment in its history; in unit 2 we’ll consider how film and television adaptations have reinvented her best known novel, *Pride and Prejudice*, for a different historical moment, and in unit 3 students will engage with Austen scholarship by writing a research paper on an Austen novel or film adaption of their choice.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.145. Jane Austen, Then and Now**  
Catalog Number: 47117 Enrollment: Limited to 15.  
*Tess O’Toole*  
*Half course (spring term). Hours to be arranged.*  
This course considers Austen in her own historical context and ours, and as an author whose importance lies both inside and outside the university. In our first unit, we’ll undertake a close reading of *Persuasion* in order to assess Austen’s analysis of British society at a transitional moment in its history; in unit 2 we’ll consider how film and television adaptations have reinvented her best known novel, *Pride and Prejudice*, for a different historical moment, and in unit 3 students will engage with Austen scholarship by writing a research paper on an Austen novel or film adaption of their choice.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.146. The Problem of the Mind**  
Catalog Number: 62224 Enrollment: Limited to 15.  
*Eoin Ryan*  
*Half course (fall term). Tu., Th., at 12.*  
This course introduces some central concerns of philosophy of mind. Students will learn about the historical framing of philosophical problems about the mind. They will then study various approaches to solving these issues that have been attempted during the twentieth century and until today, critiquing the strengths and weaknesses of these theories, in philosophical, scientific, and cultural terms. Finally, the notion of the self and its relation to the mind will be examined.

**Expository Writing 20.147. The Problem of the Mind**  
Catalog Number: 10702 Enrollment: Limited to 15.  
*Eoin Ryan*  
*Half course (fall term). Tu., Th., at 1.*  
This course introduces some central concerns of philosophy of mind. Students will learn about
the historical framing of philosophical problems about the mind. They will then study various approaches to solving these issues that have been attempted during the twentieth century and until today, critiquing the strengths and weaknesses of these theories, in philosophical, scientific, and cultural terms. Finally, the notion of the self and its relation to the mind will be examined.

[Expository Writing 20.148. The Problem of the Mind]
Catalog Number: 77331 Enrollment: Limited to 15.
Eoin Ryan
Half course (spring term). Hours to be arranged.
This course introduces some central concerns of philosophy of mind. Students will learn about the historical framing of philosophical problems about the mind. They will then study various approaches to solving these issues that have been attempted during the twentieth century and until today, critiquing the strengths and weaknesses of these theories, in philosophical, scientific, and cultural terms. Finally, the notion of the self and its relation to the mind will be examined.
Note: Expected to be given in 2013–14.

[Expository Writing 20.149. The Problem of the Mind]
Catalog Number: 25809 Enrollment: Limited to 15.
Eoin Ryan
Half course (spring term). Hours to be arranged.
This course introduces some central concerns of philosophy of mind. Students will learn about the historical framing of philosophical problems about the mind. They will then study various approaches to solving these issues that have been attempted during the twentieth century and until today, critiquing the strengths and weaknesses of these theories, in philosophical, scientific, and cultural terms. Finally, the notion of the self and its relation to the mind will be examined.
Note: Expected to be given in 2013–14.

[Expository Writing 20.154. Resistance]
Catalog Number: 19608 Enrollment: Limited to 15.
Kelsey W. McNiff
Half course (fall term). M., W., at 12.
What constitutes an act of resistance? What role do individual beliefs, collective action, public protest, art and literature have in resistance movements? What can the study of resistance teach us about the past and about the world we live in today? This course will explore these questions through case studies drawn from contemporary politics and culture, the apartheid era in South Africa, and Harvard history.
Note: Expected to be given in 2013–14.

[Expository Writing 20.155. Resistance]
Catalog Number: 86237 Enrollment: Limited to 15.
Kelsey W. McNiff
Half course (fall term). M., W., at 1.
What constitutes an act of resistance? What role do individual beliefs, collective action, public protest, art and literature have in resistance movements? What can the study of resistance teach us about the past and about the world we live in today? This course will explore these questions through case studies drawn from contemporary politics and culture, the apartheid era in South
Expository Writing 20.156. Resistance
Catalog Number: 34715 Enrollment: Limited to 15.
Kelsey W. McNiff
Half course (spring term). Tu., Th., at 12.
What constitutes an act of resistance? What role do individual beliefs, collective action, public protest, art and literature have in resistance movements? What can the study of resistance teach us about the past and about the world we live in today? This course will explore these questions through case studies drawn from contemporary politics and culture, the apartheid era in South Africa, and Harvard history.

Expository Writing 20.157. Resistance
Catalog Number: 49822 Enrollment: Limited to 15.
Kelsey W. McNiff
Half course (spring term). Tu., Th., at 1.
What constitutes an act of resistance? What role do individual beliefs, collective action, public protest, art and literature have in resistance movements? What can the study of resistance teach us about the past and about the world we live in today? This course will explore these questions through case studies drawn from contemporary politics and culture, the apartheid era in South Africa, and Harvard history.

[Expository Writing 20.163. Cities and Globalization]
Catalog Number: 65925 Enrollment: Limited to 15.
Elizabeth Greenspan
Half course (spring term). Hours to be arranged.
This course investigates how "the global city" brings to the fore the opportunities and challenges of contemporary globalization. How do economic and cultural forms link cities like New York, Paris, and Mumbai? How is urban protest a response to globalization? We will answer these questions by reading a variety of texts - including theoretical works by Saskia Sassen and Ulf Hannerz, and literary non-fiction by Suketu Mehta - and viewing artistic interpretations, including the film "La Haine."
Note: Expected to be given in 2013–14.

Expository Writing 20.164. Tragedy and Everyday Life
Catalog Number: 14403 Enrollment: Limited to 15.
Jonah M. Johnson
Half course (spring term). M., W., at 11.
In this course we will examine tragedies both ancient and modern, focusing on problems such as self-knowledge, certainty, intra- and interpersonal conflict, and loneliness. We will explore tragedy both as a form and as a collection of themes, and we will compare the idiosyncratic ways in which terms such as "tragedy" and "tragic" have developed within academic as well as mainstream contexts. Readings and screenings will include works by Sophocles, Shakespeare, Bergman, and Hitchcock.
Expository Writing 20.165. Tragedy and Everyday Life
Catalog Number: 81032 Enrollment: Limited to 15.
Jonah M. Johnson
Half course (spring term). M., W., at 12.
In this course we will examine tragedies both ancient and modern, focusing on problems such as self-knowledge, certainty, intra- and interpersonal conflict, and loneliness. We will explore tragedy both as a form and as a collection of themes, and we will compare the idiosyncratic ways in which terms such as "tragedy" and "tragic" have developed within academic as well as mainstream contexts. Readings and screenings will include works by Sophocles, Shakespeare, Bergman, and Hitchcock.

Expository Writing 20.167. Social Worlds of Friendship
Catalog Number: 38416 Enrollment: Limited to 15.
Dwight Fee
Half course (spring term). Tu., Th., at 11.
Most of us appreciate the importance of friendship, but do we really understand how friendships are formed and how they shape our lives? Do friendships hold a larger potential for social transformation? This course explores the meaning and significance of friendship, particularly in terms of personal identity, community building, and social change. We will explore classical ideas about friendship and delve into contemporary issues such as friendship and difference, changes in personal communities, and the challenge that friendship poses to traditional relational forms.

Expository Writing 20.168. Social Worlds of Friendship
Catalog Number: 53523 Enrollment: Limited to 15.
Dwight Fee
Half course (spring term). Tu., Th., at 12.
Most of us appreciate the importance of friendship, but do we really understand how friendships are formed and how they shape our lives? Do friendships hold a larger potential for social transformation? This course explores the meaning and significance of friendship, particularly in terms of personal identity, community building, and social change. We will explore classical ideas about friendship and delve into contemporary issues such as friendship and difference, changes in personal communities, and the challenge that friendship poses to traditional relational forms.

Expository Writing 20.169. Imagining Animals
Catalog Number: 17108 Enrollment: Limited to 15.
David Hahn
Half course (spring term). M., W., at 11.
What might the world look like to an animal? To what extent can we as humans even imagine such a perspective? First, we will develop a working understanding of the problem of imagining animals; in Unit II, we will test certain philosophical claims against scientific accounts. In Unit III, we will more directly confront the practical question of how to live with animals, evaluating arguments from ethics and interspecies theory. Readings include: Nagel’s *What Is It Like to Be a Bat?*; Horowitz’s *Inside of a Dog*; Grandin’s *Animals in Translation*; and David Foster Wallace’s *Consider the Lobster*.
Expository Writing 20.170. Imagining Animals
Catalog Number: 83737 Enrollment: Limited to 15.
David Hahn
Half course (spring term). M., W., at 12.
What might the world look like to an animal? To what extent can we as humans even imagine such a perspective? First, we will develop a working understanding of the problem of imagining animals; in Unit II, we will test certain philosophical claims against scientific accounts. In Unit III, we will more directly confront the practical question of how to live with animals, evaluating arguments from ethics and interspecies theory. Readings include: Nagel’s *What Is It Like to Be a Bat?*; Horowitz’s *Inside of a Dog*; Grandin’s *Animals in Translation*; and David Foster Wallace’s *Consider the Lobster*.

Expository Writing 20.171. Boston in Words and Images
Catalog Number: 32215 Enrollment: Limited to 15.
Christina Becker
Half course (spring term). M., W., at 1.
This course will explore various cultural myths about Boston: Unit 1 will consider the myth of Boston as the most "European" city in America by analyzing Henry James’s *The Europeans*; Unit 2 will examine the fantasy of Boston as a dark underworld of crime in films like Clint Eastwood’s *Mystic River* and Martin Scorsese’s *The Departed*; and in Unit 3 students will undertake independent research on Boston as the ultimate symbol of Ivy League privilege.

Expository Writing 20.172. Is Poetry Necessary?
Catalog Number: 98844 Enrollment: Limited to 15.
David C. Barber
Half course (spring term). Tu., Th., at 1.
Poetry has traditionally exemplified the greatest height of artistic expression, but it is also the art with the longest history of having its authority and integrity called into question. This course examines emblematic works in prose and verse that grapple with perennial disputes over the significance of poetry. We’ll consider both modern and classical conceptions of poetry’s purpose and value as we question why so many poets have found it necessary to defend and justify their art.

Expository Writing 20.173. On Risk and Reason
Catalog Number: 47322 Enrollment: Limited to 15.
Adrienne Tierney
Half course (spring term). Tu., Th., at 1.
Scientific findings about human health and behavior are often described in terms of risk. However, reasoning about risk turns out to be a complex task. In this course, we will explore why messages about risk are challenging to understand. We will focus on what cognitive capacities are involved in thinking about and making decisions based on information presented in terms of risk.

Expository Writing 20.174. Reading the Body
Catalog Number: 43826 Enrollment: Limited to 15.
Rebecca Summerhays
Half course (spring term). Tu., Th., at 11.
What does it mean—and what has it meant—to have a body? How does the way we think about our bodies depend upon the technologies we use to manage and measure them and the artistic forms we use to represent them? We will explore Harvard’s collection of medical curiosities and instruments, analyze how Lamarck, Paley, Darwin, and Byatt theorize the human body, and explore contemporary representations of the body in many contexts, from films to athletics.

Expository Writing 20.175. Reading the Body
Catalog Number: 58933 Enrollment: Limited to 15.
Rebecca Summerhayes
Half course (spring term). Tu., Th., at 12.
What does it mean—and what has it meant—to have a body? How does the way we think about our bodies depend upon the technologies we use to manage and measure them and the artistic forms we use to represent them? We will explore Harvard’s collection of medical curiosities and instruments, analyze how Lamarck, Paley, Darwin, and Byatt theorize the human body, and explore contemporary representations of the body in many contexts, from films to athletics.

Expository Writing 20.176. Social Worlds of Friendship - (New Course)
Catalog Number: 42619 Enrollment: Limited to 15.
Dwight Fee
Half course (fall term). Tu., Th., at 11.
Most of us appreciate the importance of friendship, but do we really understand how friendships are formed and how they shape our lives? Do friendships hold a larger potential for social transformation? This course explores the meaning and significance of friendship, particularly in terms of personal identity, community building, and social change. We will explore classical ideas about friendship and delve into contemporary issues such as friendship and difference, changes in personal communities, and the challenge that friendship poses to traditional relational forms.

Expository Writing 20.177. Social Worlds of Friendship - (New Course)
Catalog Number: 73332 Enrollment: Limited to 15.
Dwight Fee
Half course (fall term). Tu., Th., at 12.
Most of us appreciate the importance of friendship, but do we really understand how friendships are formed and how they shape our lives? Do friendships hold a larger potential for social transformation? This course explores the meaning and significance of friendship, particularly in terms of personal identity, community building, and social change. We will explore classical ideas about friendship and delve into contemporary issues such as friendship and difference, changes in personal communities, and the challenge that friendship poses to traditional relational forms.

Expository Writing 20.178. Imagining Animals - (New Course)
Catalog Number: 23463 Enrollment: Limited to 15.
David Hahn
What might the world look like to an animal? To what extent can we as humans even imagine
such a perspective? First, we will develop a working understanding of the problem of imagining animals; in Unit II, we will test certain philosophical claims against scientific accounts. In Unit III, we will more directly confront the practical question of how to live with animals, evaluating arguments from ethics and interspecies theory. Readings include: Nagel’s *What Is It Like to Be a Bat?*; Horowitz’s *Inside of a Dog*; Grandin’s *Animals in Translation*; and David Foster Wallace’s *Consider the Lobster*.

**Expository Writing 20.179. Imagining Animals - (New Course)**
Catalog Number: 16549 Enrollment: Limited to 15.
David Hahn
Half course (fall term). M., W., at 10.

What might the world look like to an animal? To what extent can we as humans even imagine such a perspective? First, we will develop a working understanding of the problem of imagining animals; in Unit II, we will test certain philosophical claims against scientific accounts. In Unit III, we will more directly confront the practical question of how to live with animals, evaluating arguments from ethics and interspecies theory. Readings include: Nagel’s *What Is It Like to Be a Bat?*; Horowitz’s *Inside of a Dog*; Grandin’s *Animals in Translation*; and David Foster Wallace’s *Consider the Lobster*.

**Expository Writing 20.180. Boston in Words and Images - (New Course)**
Catalog Number: 15573 Enrollment: Limited to 15.
Christina Becker
Half course (fall term). Tu., Th., at 10.
This course will explore various cultural myths about Boston: Unit 1 will consider the myth of Boston as the most "European" city in America by analyzing Henry James’s *The Europeans*; Unit 2 will examine the fantasy of Boston as a dark underworld of crime in films like Clint Eastwood’s *Mystic River* and Martin Scorsese’s *The Departed*; and in Unit 3 students will undertake independent research on Boston as the ultimate symbol of Ivy League privilege.

**Expository Writing 20.181. Boston in Words and Images - (New Course)**
Catalog Number: 14232 Enrollment: Limited to 15.
Christina Becker
Half course (fall term). Tu., Th., at 11.
This course will explore various cultural myths about Boston: Unit 1 will consider the myth of Boston as the most "European" city in America by analyzing Henry James’s *The Europeans*; Unit 2 will examine the fantasy of Boston as a dark underworld of crime in films like Clint Eastwood’s *Mystic River* and Martin Scorsese’s *The Departed*; and in Unit 3 students will undertake independent research on Boston as the ultimate symbol of Ivy League privilege.

**Expository Writing 20.182. Boston in Words and Images - (New Course)**
Catalog Number: 11039 Enrollment: Limited to 15.
Christina Becker
This course will explore various cultural myths about Boston: Unit 1 will consider the myth of Boston as the most "European" city in America by analyzing Henry James’s *The Europeans*; Unit 2 will examine the fantasy of Boston as a dark underworld of crime in films like Clint
Eastwood’s *Mystic River* and Martin Scorsese’s *The Departed*; and in Unit 3 students will undertake independent research on Boston as the ultimate symbol of Ivy League privilege.

**Expository Writing 20.184. On Risk and Reason - (New Course)**
Catalog Number: 86869 Enrollment: Limited to 15.
*Adrienne Tierney*
*Half course (fall term). Tu., Th., at 12.*
Scientific findings about human health and behavior are often described in terms of risk. However, reasoning about risk turns out to be a complex task. In this course, we will explore why messages about risk are challenging to understand. We will focus on what cognitive capacities are involved in thinking about and making decisions based on information presented in terms of risk.

**Expository Writing 20.185. On Risk and Reason - (New Course)**
Catalog Number: 82633 Enrollment: Limited to 15.
*Adrienne Tierney*
*Half course (fall term). Tu., Th., at 1.*
Scientific findings about human health and behavior are often described in terms of risk. However, reasoning about risk turns out to be a complex task. In this course, we will explore why messages about risk are challenging to understand. We will focus on what cognitive capacities are involved in thinking about and making decisions based on information presented in terms of risk.

**Expository Writing 20.186. Indian Philosophy and the Search for the Self - (New Course)**
Catalog Number: 15057 Enrollment: Limited to 15.
*Michael S. Allen*
*Half course (fall term). M., W., at 10.*
Who are you? What does it mean to have a self, and how do we even know we have one? This course explores the views of thinkers who radically challenge our everyday notions of self: Buddhist philosophers who denied the very existence of the self, and Hindu philosophers who taught that most of us are ignorant of our true selves. We will read early scriptural classics, later philosophical literature, and works on yoga and meditation, concluding with a look at the transformation of these practices in contemporary American culture.

**Expository Writing 20.187. Indian Philosophy and the Search for the Self - (New Course)**
Catalog Number: 94674 Enrollment: Limited to 15.
*Michael S. Allen*
*Half course (fall term). M., W., at 11.*
Who are you? What does it mean to have a self, and how do we even know we have one? This course explores the views of thinkers who radically challenge our everyday notions of self: Buddhist philosophers who denied the very existence of the self, and Hindu philosophers who taught that most of us are ignorant of our true selves. We will read early scriptural classics, later philosophical literature, and works on yoga and meditation, concluding with a look at the transformation of these practices in contemporary American culture.
Expository Writing 20.188. Indian Philosophy and the Search for the Self - (New Course)
Catalog Number: 22383 Enrollment: Limited to 15.
Michael S. Allen
Half course (spring term). M., W., at 10.
Who are you? What does it mean to have a self, and how do we even know we have one? This course explores the views of thinkers who radically challenge our everyday notions of self: Buddhist philosophers who denied the very existence of the self, and Hindu philosophers who taught that most of us are ignorant of our true selves. We will read early scriptural classics, later philosophical literature, and works on yoga and meditation, concluding with a look at the transformation of these practices in contemporary American culture.

Expository Writing 20.189. Indian Philosophy and the Search for the Self - (New Course)
Catalog Number: 99002
Michael S. Allen
Half course (spring term). M., W., at 11.
Who are you? What does it mean to have a self, and how do we even know we have one? This course explores the views of thinkers who radically challenge our everyday notions of self: Buddhist philosophers who denied the very existence of the self, and Hindu philosophers who taught that most of us are ignorant of our true selves. We will read early scriptural classics, later philosophical literature, and works on yoga and meditation, concluding with a look at the transformation of these practices in contemporary American culture.

Expository Writing 20.190. The Rise of China - (New Course)
Catalog Number: 51015 Enrollment: Limited to 15.
Sara A. Newland
Half course (fall term). M., W., at 12.
If the 20th century was the "American Century," will the 21st be the "Chinese Century"? As the locus of global economic growth shifts to Asia, what cultural and political changes will accompany this transformation? Does China’s rise represent a threat, a competing set of values, an opportunity, or some combination of the three? In this course, we will examine the causes and consequences of China’s ascendance as a global power. Relying on sources ranging from oral histories to Wikileaks cables, we will analyze how China is changing and how people across the globe understand China’s relevance to their own lives.

Expository Writing 20.191. The Rise of China - (New Course)
Catalog Number: 92256 Enrollment: Limited to 15.
Sara A. Newland
Half course (fall term). M., W., at 1.
If the 20th century was the "American Century," will the 21st be the "Chinese Century"? As the locus of global economic growth shifts to Asia, what cultural and political changes will accompany this transformation? Does China’s rise represent a threat, a competing set of values, an opportunity, or some combination of the three? In this course, we will examine the causes and consequences of China’s ascendance as a global power. Relying on sources ranging from oral histories to Wikileaks cables, we will analyze how China is changing and how people across the globe understand China’s relevance to their own lives.
**Expository Writing 20.192. The Rise of China - (New Course)**
Catalog Number: 93478 Enrollment: Limited to 15.
_Sara A. Newland_

_Half course (spring term). M., W., at 12._

If the 20th century was the "American Century," will the 21st be the "Chinese Century"? As the locus of global economic growth shifts to Asia, what cultural and political changes will accompany this transformation? Does China’s rise represent a threat, a competing set of values, an opportunity, or some combination of the three? In this course, we will examine the causes and consequences of China’s ascendance as a global power. Relying on sources ranging from oral histories to Wikileaks cables, we will analyze how China is changing and how people across the globe understand China’s relevance to their own lives.

**Expository Writing 20.193. The Rise of China - (New Course)**
Catalog Number: 77031 Enrollment: Limited to 15.
_Sara A. Newland_

_Half course (spring term). M., W., at 1._

If the 20th century was the "American Century," will the 21st be the "Chinese Century"? As the locus of global economic growth shifts to Asia, what cultural and political changes will accompany this transformation? Does China’s rise represent a threat, a competing set of values, an opportunity, or some combination of the three? In this course, we will examine the causes and consequences of China’s ascendance as a global power. Relying on sources ranging from oral histories to Wikileaks cables, we will analyze how China is changing and how people across the globe understand China’s relevance to their own lives.

**Expository Writing 20.194. Dangerous Speech - (New Course)**
Catalog Number: 24282 Enrollment: Limited to 15.
_Deirdre Alanna Mask_

_Half course (fall term). Tu., Th., at 10._

"Congress shall make no law . . . abridging the freedom of speech." The First Amendment has, with this short statement, made America exceptional in its protection of free expression. Yet our commitment to the freedom of speech has real limits. In this course, we’ll examine the extent to which the First Amendment protects "dangerous speech"-a category that includes incitements to violence, hate speech, and the communication of "subversive" ideas. Through analysis of Supreme Court decisions, First Amendment theorists and contextual materials, we’ll probe the boundaries of, in Justice Holmes’s words, "the freedom for the thought that we hate."

**Expository Writing 20.195. Dangerous Speech - (New Course)**
Catalog Number: 20143 Enrollment: Limited to 15.
_Deirdre Alanna Mask_

_Half course (fall term). Tu., Th., at 11._

"Congress shall make no law . . . abridging the freedom of speech." The First Amendment has, with this short statement, made America exceptional in its protection of free expression. Yet our commitment to the freedom of speech has real limits. In this course, we’ll examine the extent to which the First Amendment protects "dangerous speech"-a category that includes incitements to violence, hate speech, and the communication of "subversive" ideas. Through analysis of
Supreme Court decisions, First Amendment theorists and contextual materials, we’ll probe the boundaries of, in Justice Holmes’s words, "the freedom for the thought that we hate."

**Expository Writing 20.196. Dangerous Speech - (New Course)**
Catalog Number: 39724 Enrollment: Limited to 15.
*Deirdre Alanna Mask*
*Half course (spring term). Tu., Th., at 10.*
"Congress shall make no law . . . abridging the freedom of speech." The First Amendment has, with this short statement, made America exceptional in its protection of free expression. Yet our commitment to the freedom of speech has real limits. In this course, we’ll examine the extent to which the First Amendment protects "dangerous speech"-a category that includes incitements to violence, hate speech, and the communication of "subversive" ideas. Through analysis of Supreme Court decisions, First Amendment theorists and contextual materials, we’ll probe the boundaries of, in Justice Holmes’s words, "the freedom for the thought that we hate."

**Expository Writing 20.197. Dangerous Speech] - (New Course)**
Catalog Number: 70696 Enrollment: Limited to 15.
*Deirdre Alanna Mask*
*Half course (spring term). Hours to be arranged.*
"Congress shall make no law . . . abridging the freedom of speech." The First Amendment has, with this short statement, made America exceptional in its protection of free expression. Yet our commitment to the freedom of speech has real limits. In this course, we’ll examine the extent to which the First Amendment protects "dangerous speech"-a category that includes incitements to violence, hate speech, and the communication of "subversive" ideas. Through analysis of Supreme Court decisions, First Amendment theorists and contextual materials, we’ll probe the boundaries of, in Justice Holmes’s words, "the freedom for the thought that we hate."
*Note: Expected to be given in 2013–14.*

**Expository Writing 20.198. Improvisation - (New Course)**
Catalog Number: 89893 Enrollment: Limited to 15.
*James A. Dennen*
*Half course (fall term). M., W., at 10.*
This course looks at a wide range of performances to discover what improvisation really means. In Unit 1 we explore contemporary films to investigate the function of improvisation in realistic acting and story telling. Then we examine a local "improv comedy" production, asking questions about this genre’s effectiveness as social criticism. In Unit 3 we look at diverse forms-such as Jazz, spoken word, freestyle, DJ, dance, and sports-as well as the work of scholars, critics, and journalists written in response to these performances in order to wrestle with the special meanings that these commentators have given to improvisation.

**Expository Writing 20.199. Improvisation] - (New Course)**
Catalog Number: 73769 Enrollment: Limited to 15.
*James A. Dennen*
*Half course (fall term). Hours to be arranged.*
This course looks at a wide range of performances to discover what improvisation really means. In Unit 1 we explore contemporary films to investigate the function of improvisation in realistic
acting and story telling. Then we examine a local "improv comedy" production, asking questions about this genre’s effectiveness as social criticism. In Unit 3 we look at diverse forms—such as Jazz, spoken word, freestyle, DJ, dance, and sports—as well as the work of scholars, critics, and journalists written in response to these performances in order to wrestle with the special meanings that these commentators have given to improvisation.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.200. Improvisation in Life and Art - (New Course)**

<table>
<thead>
<tr>
<th>Catalog Number: 14966</th>
<th>Enrollment: Limited to 15.</th>
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</table>

*James A. Dennen*  
*Half course (spring term). M., W., at 10.*

This course looks at a wide range of performances to discover what improvisation really means. In Unit 1 we explore contemporary films to investigate the function of improvisation in realistic acting and story telling. Then we examine a local "improv comedy" production, asking questions about this genre’s effectiveness as social criticism. In Unit 3 we look at diverse forms—such as Jazz, Blues, spoken word, DJ, dance, and sports—in order to revise how we conventionally understand entertainment and art, authenticity and imitation, artistic freedom and tradition, and the pleasures of being a spectator.

**Expository Writing 20.201. Improvisation in Life and Art - (New Course)**

<table>
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<tr>
<th>Catalog Number: 27152</th>
<th>Enrollment: Limited to 15.</th>
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</table>

*James A. Dennen*  
*Half course (spring term). Hours to be arranged.*

This course looks at a wide range of performances to discover what improvisation really means. In Unit 1 we explore contemporary films to investigate the function of improvisation in realistic acting and story telling. Then we examine a local "improv comedy" production, asking questions about this genre’s effectiveness as social criticism. In Unit 3 we look at diverse forms—such as Jazz, Blues, spoken word, DJ, dance, and sports—in order to revise how we conventionally understand entertainment and art, authenticity and imitation, artistic freedom and tradition, and the pleasures of being a spectator.

*Note:* Expected to be given in 2013–14.

**Expository Writing 20.202. Evolutionary Leaps - (New Course)**

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<thead>
<tr>
<th>Catalog Number: 30397</th>
<th>Enrollment: Limited to 15.</th>
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</table>

*Erin Leigh Blevins*  
*Half course (fall term). Tu., Th., at 10.*

Evolution occurs in slow, infinitesimal steps—but looking back, certain changes stand out as great leaps. Fish ventured onto land. Birds took flight. An ape-like ancestor became...us. In this course, we’ll investigate a 300-million-year-old fossil fish that led Harvard scientists to the Arctic and close encounters with polar bears. We’ll explore the evolution of bird flight, debating current, competing ideas connecting fossil feathers and modern wings. And we’ll tackle a question discussed since Darwin’s time—what makes us (humans) special? Big brains? Fire? Something else? Drawing on scientific sources, you’ll present your own thoughts on what makes us uniquely human.
[Expository Writing 20.203. Evolutionary Leaps] - (New Course)
Catalog Number: 62818 Enrollment: Limited to 15.
Erin Leigh Blevins
Half course (fall term). Hours to be arranged.
Evolution occurs in slow, infinitesimal steps—but looking back, certain changes stand out as great leaps. Fish ventured onto land. Birds took flight. An ape-like ancestor became...us. In this course, we’ll investigate a 300-million-year-old fossil fish that led Harvard scientists to the Arctic and close encounters with polar bears. We’ll explore the evolution of bird flight, debating current, competing ideas connecting fossil feathers and modern wings. And we’ll tackle a question discussed since Darwin’s time—what makes us (humans) special? Big brains? Fire? Something else? Drawing on scientific sources, you’ll present your own thoughts on what makes us uniquely human.
Note: Expected to be given in 2013–14.

Expository Writing 20.204. Evolutionary Leaps - (New Course)
Catalog Number: 42426 Enrollment: Limited to 15.
Erin Leigh Blevins
Half course (spring term). Tu., Th., at 10.
Evolution occurs in slow, infinitesimal steps—but looking back, certain changes stand out as great leaps. Fish ventured onto land. Birds took flight. An ape-like ancestor became...us. In this course, we’ll investigate a 300-million-year-old fossil fish that led Harvard scientists to the Arctic and close encounters with polar bears. We’ll explore the evolution of bird flight, debating current, competing ideas connecting fossil feathers and modern wings. And we’ll tackle a question discussed since Darwin’s time—what makes us (humans) special? Big brains? Fire? Something else? Drawing on scientific sources, you’ll present your own thoughts on what makes us uniquely human.

Expository Writing 20.205. Evolutionary Leaps - (New Course)
Catalog Number: 87375 Enrollment: Limited to 15.
Erin Leigh Blevins
Half course (spring term). Tu., Th., at 11.
Evolution occurs in slow, infinitesimal steps—but looking back, certain changes stand out as great leaps. Fish ventured onto land. Birds took flight. An ape-like ancestor became...us. In this course, we’ll investigate a 300-million-year-old fossil fish that led Harvard scientists to the Arctic and close encounters with polar bears. We’ll explore the evolution of bird flight, debating current, competing ideas connecting fossil feathers and modern wings. And we’ll tackle a question discussed since Darwin’s time—what makes us (humans) special? Big brains? Fire? Something else? Drawing on scientific sources, you’ll present your own thoughts on what makes us uniquely human.

Expository Writing 20.206. Orientalism in Art, Literature & Film - (New Course)
Catalog Number: 69853 Enrollment: Limited to 15.
Justine Renee De Young
Half course (fall term). Tu., Th., at 10.
Western stereotypes of the Middle East conjure up images of Aladdin and his lamp, bustling bazaars and vast deserts, mysterious women in veils and sinister men in turbans. This course will
investigate the nineteenth-century origins and later life of these stereotypes, examining works by Ingres, Delacroix, Renoir, Sargent, Flaubert and Wilde to unearth the meanings, motives, and implications of Orientalist art and literature. Finally, we will consider later manifestations of (and reactions to) Orientalism in film—from its earliest days to the present—including The Sheik, Lawrence of Arabia, Cleopatra, Aladdin, Syriana, and The Hurt Locker.

**Expository Writing 20.207. Orientalism in Art, Literature & Film - (New Course)**
Catalog Number: 62484 Enrollment: Limited to 15.
Justine Renee De Young
Half course (fall term). Tu., Th., at 11.
Western stereotypes of the Middle East conjure up images of Aladdin and his lamp, bustling bazaars and vast deserts, mysterious women in veils and sinister men in turbans. This course will investigate the nineteenth-century origins and later life of these stereotypes, examining works by Ingres, Delacroix, Renoir, Sargent, Flaubert and Wilde to unearth the meanings, motives, and implications of Orientalist art and literature. Finally, we will consider later manifestations of (and reactions to) Orientalism in film—from its earliest days to the present—including The Sheik, Lawrence of Arabia, Cleopatra, Aladdin, Syriana, and The Hurt Locker.

**Expository Writing 20.208. Orientalism in Art, Literature & Film - (New Course)**
Catalog Number: 64049 Enrollment: Limited to 15.
Justine Renee De Young
Half course (spring term). Tu., Th., at 10.
Western stereotypes of the Middle East conjure up images of Aladdin and his lamp, bustling bazaars and vast deserts, mysterious women in veils and sinister men in turbans. This course will investigate the nineteenth-century origins and later life of these stereotypes, examining works by Ingres, Delacroix, Renoir, Sargent, Flaubert and Wilde to unearth the meanings, motives, and implications of Orientalist art and literature. Finally, we will consider later manifestations of (and reactions to) Orientalism in film—from its earliest days to the present—including The Sheik, Lawrence of Arabia, Cleopatra, Aladdin, Syriana, and The Hurt Locker.

**Expository Writing 20.209. Orientalism in Art, Literature & Film - (New Course)**
Catalog Number: 40963 Enrollment: Limited to 15.
Justine Renee De Young
Half course (spring term). Tu., Th., at 11.
Western stereotypes of the Middle East conjure up images of Aladdin and his lamp, bustling bazaars and vast deserts, mysterious women in veils and sinister men in turbans. This course will investigate the nineteenth-century origins and later life of these stereotypes, examining works by Ingres, Delacroix, Renoir, Sargent, Flaubert and Wilde to unearth the meanings, motives, and implications of Orientalist art and literature. Finally, we will consider later manifestations of (and reactions to) Orientalism in film—from its earliest days to the present—including The Sheik, Lawrence of Arabia, Cleopatra, Aladdin, Syriana, and The Hurt Locker.

**Expository Writing 20.210. Tragedy and Everyday Life - (New Course)**
Catalog Number: 26509 Enrollment: Limited to 15.
Jonah M. Johnson
Half course (fall term). M., W., at 12.
In this course we will examine tragedies both ancient and modern, focusing on problems such as self-knowledge, certainty, intra- and interpersonal conflict, and loneliness. We will explore tragedy both as a form and as a collection of themes, and we will compare the idiosyncratic ways in which terms such as "tragedy" and "tragic" have developed within academic as well as mainstream contexts. Readings and screenings will include works by Sophocles, Shakespeare, Bergman, and Hitchcock.

**Expository Writing 20.211. Tragedy and Everyday Life - (New Course)**
Catalog Number: 65696 Enrollment: Limited to 15.
*Jonah M. Johnson*
*Half course (fall term). M., W., at 11.*
In this course we will examine tragedies both ancient and modern, focusing on problems such as self-knowledge, certainty, intra- and interpersonal conflict, and loneliness. We will explore tragedy both as a form and as a collection of themes, and we will compare the idiosyncratic ways in which terms such as "tragedy" and "tragic" have developed within academic as well as mainstream contexts. Readings and screenings will include works by Sophocles, Shakespeare, Bergman, and Hitchcock.

**Expository Writing 20.212. American Christianities - (New Course)**
Catalog Number: 48029 Enrollment: Limited to 15.
*Michelle Syba*
*Half course (fall term). Tu., Th., at 9.*
At a time when the chasm between believers and nonbelievers is wider than ever, Christianity remains a religion with a complex legacy and presence in America. What forms has Christianity taken in the recent past, and how have they been shaped by and responded to American history and ideology? What tensions and paradoxes have emerged as Christianity contends with the influences of pluralism, secularism, and new technologies? This course explores American Christianities via literary, anthropological, historical, and philosophical sources, as well as students’ own research on either the neopentecostal Vineyard church, Mormonism, or the possibility of a "post-religious" Christianity.

**Expository Writing 20.213. American Christianities - (New Course)**
Catalog Number: 68701 Enrollment: Limited to 15.
*Michelle Syba*
*Half course (fall term). Tu., Th., at 10.*
At a time when the chasm between believers and nonbelievers is wider than ever, Christianity remains a religion with a complex legacy and presence in America. What forms has Christianity taken in the recent past, and how have they been shaped by and responded to American history and ideology? What tensions and paradoxes have emerged as Christianity contends with the influences of pluralism, secularism, and new technologies? This course explores American Christianities via literary, anthropological, historical, and philosophical sources, as well as students’ own research on either the neopentecostal Vineyard church, Mormonism, or the possibility of a "post-religious" Christianity.

**Expository Writing 20.214. American Christianities - (New Course)**
Catalog Number: 97892 Enrollment: Limited to 15.
Michelle Syba
Half course (spring term). Hours to be arranged.
At a time when the chasm between believers and nonbelievers is wider than ever, Christianity remains a religion with a complex legacy and presence in America. What forms has Christianity taken in the recent past, and how have they been shaped by and responded to American history and ideology? What tensions and paradoxes have emerged as Christianity contends with the influences of pluralism, secularism, and new technologies? This course explores American Christianities via literary, anthropological, historical, and philosophical sources, as well as students’ own research on either the neopentecostal Vineyard church, Mormonism, or the possibility of a "post-religious" Christianity.
Note: Expected to be given in 2013–14.

Catalog Number: 58271 Enrollment: Limited to 15.
Michelle Syba
Half course (spring term). Hours to be arranged.
At a time when the chasm between believers and nonbelievers is wider than ever, Christianity remains a religion with a complex legacy and presence in America. What forms has Christianity taken in the recent past, and how have they been shaped by and responded to American history and ideology? What tensions and paradoxes have emerged as Christianity contends with the influences of pluralism, secularism, and new technologies? This course explores American Christianities via literary, anthropological, historical, and philosophical sources, as well as students’ own research on either the neopentecostal Vineyard church, Mormonism, or the possibility of a "post-religious" Christianity.
Note: Expected to be given in 2013–14.

Expository Writing 20.216. On Risk and Reason - (New Course)
Catalog Number: 47496
Adrienne Leigh Tierney
Half course (spring term). Tu., Th., at 2.
Scientific findings about human health and behavior are often described in terms of risk. However, reasoning about risk turns out to be a complex task. In this course, we will explore why messages about risk are challenging to understand. We will focus on what cognitive capacities are involved in thinking about and making decisions based on information presented in terms of risk.

Expository Writing 20.219. Food - (New Course)
Catalog Number: 26584 Enrollment: Limited to 15.
Donna L. Mumme
Half course (spring term). M., W., at 10.
What should we eat? What do we eat? Why do we eat it? Thinking about these questions and the psychology behind what we eat are the focus of this course. First, we will examine the debate between "sustainable" and "industrialized" farming as we consider what drives our food choices. Next, we will use psychology research on eating, decision-making, and behavior change to evaluate the soundness of a recent food-related policy decision aimed at addressing obesity.
Finally, we will take what we have learned about why we eat what we eat and research other influences to investigate our own food choices.

**Expository Writing 20.220. Food - (New Course)**  
Catalog Number: 20779  
*Donna L. Mumme*  
*Half course (spring term). M., W., at 11.*  
What should we eat? What do we eat? Why do we eat it? Thinking about these questions and the psychology behind what we eat are the focus of this course. First, we will examine the debate between "sustainable" and "industrialized" farming as we consider what drives our food choices. Next we will use psychology research on eating, decision-making, and behavior change to evaluate the soundness of a recent food-related policy decision aimed at addressing obesity. Finally, we will take what we have learned about why we eat what we eat and research other influences to investigate our own food choices.

**Expository Writing 20.221. Slave Narratives - (New Course)**  
Catalog Number: 61846 Enrollment: Limited to 15.  
*Peter Becker*  
*Half course (spring term). M., W., at 10.*  
Written in the United States from the late eighteenth to the late nineteenth century, slave narratives represented the story from slavery to freedom, the escape from the South to the North, and the intellectual journey towards literacy and public speaking. This course examines some famous representatives of the genre and the complex questions it provoked as well as post-Civil Rights modifications of such narratives. We will focus on the *Narrative of the Life of Frederick Douglass* (1845), William and Ellen Craft’s *Running a Thousand Miles for Freedom* (1860), Toni Morrison’s *Beloved* (1987), and Quentin Tarantino’s *Django Unchained* (2012).

**Expository Writing 20.222. Staging the Financial Crisis - (New Course)**  
Catalog Number: 43613 Enrollment: Limited to 15.  
*Michael Shane Boyle*  
*Half course (spring term). Tu., Th., at 11.*  
While much attention gets paid to the stories that economists have told to explain the current global financial crisis, we often overlook how cultural representations of the crisis shape public understanding of its causes and consequences. This course begins by looking back to the Great Depression through study of the Bertolt Brecht’s play *Saint Joan of the Stockyards* (1931). Next we turn attention to the 2011 film *Margin Call* to examine the contemporary financial services industry. In our final unit, students will complete a research project on a topic of their own choosing that relates to the course theme.

**Expository Writing 20.223. Staging the Financial Crisis - (New Course)**  
Catalog Number: 97894 Enrollment: Limited to 15.  
*Michael Shane Boyle*  
*Half course (spring term). Tu., Th., at 12.*  
While much attention gets paid to the stories that economists have told to explain the current global financial crisis, we often overlook how cultural representations of the crisis shape public understanding of its causes and consequences. This course begins by looking back to the Great...
Depression through study of the Bertolt Brecht’s play *Saint Joan of the Stockyards* (1931). Next we turn attention to the 2011 film *Margin Call* to examine the contemporary financial services industry. In our final unit, students will complete a research project on a topic of their own choosing that relates to the course theme.

**Expository Writing 20.224. Sports and the Law - (New Course)**
*Catalog Number: 54029 Enrollment: Limited to 15.*
*Brian T. Fobi*
*Half course (spring term). Tu., Th., at 12.*
The world of sports is one of the most dynamic and complete microcosms of American life. Since the advent of big-money professional and "amateur" athletics at the dawn of the 20th century, sports has had to confront a range of important issues revolving around fairness: race, gender, labor versus ownership, drugs, money, violence, and economic freedom. We will address these issues through court cases, articles, and documentary films. Using these sources, students will craft essays that present powerful arguments about the role and place of sports within American life.

**Expository Writing 20.225. Sports and the Law - (New Course)**
*Catalog Number: 16753 Enrollment: Limited to 15.*
*Brian T. Fobi*
*Half course (spring term). Tu., Th., at 1.*
The world of sports is one of the most dynamic and complete microcosms of American life. Since the advent of big-money professional and "amateur" athletics at the dawn of the 20th century, sports has had to confront a range of important issues revolving around fairness: race, gender, labor versus ownership, drugs, money, violence, and economic freedom. We will address these issues through court cases, articles, and documentary films. Using these sources, students will craft essays that present powerful arguments about the role and place of sports within American life.

**Expository Writing 20.226. Who Owns the Past? - (New Course)**
*Catalog Number: 54641 Enrollment: Limited to 15.*
*Janling L. Fu*
*Half course (spring term). M., W., at 1.*
What does it mean for archaeologists to discover and curate the past? We will consider the rights and problems around the passage of legislation arguing for the return of objects to Native American tribes in the United States. We will grapple with the very mission of archaeology as we study tombstones in Harvard’s own backyard, investigating the challenges faced by archaeologists as they collect and interpret often apparently scant, fragile, and historically distant data. We will probe how political regimes use archaeology to legitimate versions of the past, examining cases in Israel and Palestine, Nazi Germany, and Saddam Hussein’s regime.

**Expository Writing 20.227. Pursuing Happiness - (New Course)**
*Catalog Number: 49721 Enrollment: Limited to 15.*
*Andrew Charles Karas*
*Half course (spring term). M., W., at 11.*
How can we-as individuals and as a society-become happier? Does money buy happiness, or
does happiness instead stem from intangible causes like love and community? Or is it just a chemical reaction in our brains? And whatever its cause, how can we ethically pursue our own happiness when there is so much suffering in the world? As this seminar tackles these questions, students will investigate-in discussion and in writing-not merely the nature of happiness, but also the nature of our society’s ongoing obsession with it.

*Expository Writing 40. Public Speaking Practicum*
Catalog Number: 9155 Enrollment: Limited to 30.
James A. Dennen
Half course (fall term; repeated spring term). M., W., 2–4.
This course develops and strengthens the skills necessary for successful public speaking. Students learn strategies for impromptu speaking, preparing and delivering presentations, formulating and organizing persuasive arguments, cultivating critical thinking, engaging with an audience, using the voice and body, and building confidence in oral expression. Besides refining their skills, students receive training as public speaking tutors in preparation for serving as peer tutors for the Derek Bok Center’s Program in Speaking and Learning.

Note: See the Writing Program for admission information.

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**Film and Visual Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Standing Committee on Higher Degrees in Film and Visual Studies*

Eric Rentschler, Arthur Kingsley Porter Professor of Germanic Languages and Literatures *(Chair)*
Giuliana Bruno, Professor of Visual and Environmental Studies
Tom Conley, Abbott Lawrence Lowell Professor of Romance Languages and Literatures and of Visual and Environmental Studies
Laura A. Frahm, Assistant Professor of Visual and Environmental Studies
Peter L. Galison, Joseph Pellegrino University Professor
Carrie Lambert-Beatty, Professor of History of Art and Architecture and of Visual and Environmental Studies
D. N. Rodowick, William R. Kenan, Jr. Professor of Visual and Environmental Studies
Amie Siegel, Associate Professor of Visual and Environmental Studies *(spring term only)* *(on leave fall term)*
Justin Weir, Professor of Slavic Languages and Literatures and of Comparative Literature *(on
Related Courses of Interest for Film and Visual Studies Graduate Program

Anthropology 1732. China Through Ethnography and Film: Seminar - (New Course)
*Anthropology 1836aar (formerly *Anthropology 2835r). Sensory Ethnography I
*Anthropology 1836br (formerly *Anthropology 2836r). Sensory Ethnography II: Studio Course
Anthropology 2688. The Frankfurt School, Film, and Popular Culture
*Anthropology 2722. Sonic Ethnography - (New Course)
*Anthropology 2830. Creative Ethnography
Comparative Literature 256. Archeology of Modernity and Visual Culture
Comparative Literature 295. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education) - (New Course)
East Asian Film and Media Studies 200 (formerly East Asian Studies 200). The Uses and Meaning of the New Arts of Presentation
East Asian Film and Media Studies 201 (formerly East Asian Studies 215). Media Mix, Representations and Meaning Between Media in Japan: Seminar - (New Course)
East Asian Film and Media Studies 202 (formerly East Asian Studies 216). Rip and Tear--The Body as Moving and Moved Image in Japanese Film: Seminar - (New Course)
*East Asian Film and Media Studies 203 (formerly Japanese History 257). Animated Spirituality: Japanese Religion in Anime, Manga, and Film (Graduate Seminar in General Education) - (New Course)
*English 290. Literary Theory and Cultural Criticism: Reading 9/11
French 270. War and Memory: Representations of World War II and the Occupation in Postwar French Literature, History, and Film
History of Art and Architecture 272k. Visual Culture of Weimar Germany - (New Course)
History of Art and Architecture 274k. Russian and Soviet Avant-Garde
History of Art and Architecture 275x. Aesthetic Theories from Weimar to Adorno - (New Course)
History of Art and Architecture 276k. Frameworks in the Humanities: The Art of Looking (Graduate Seminar in General Education) - (New Course)
*History of Art and Architecture 277k. The Contemporary
[*History of Art and Architecture 277s. Circa 1970]
[History of Art and Architecture 277z. 1960’s Technical Reproductions: Prints, Photos, Books]
History of Science 221. Einstein Reversed (Graduate Seminar in General Education) - (New Course)
History of Science 289. Entangled Objects: Or the Stuff of Science, Culture, and Society [History of Science 291. Science and Art]
Music 263r. Intimate Sound Installations - (New Course)
[*Romance Studies 219. Digital Humanities 2.0: a metaLAB(at)Harvard seminar]
Slavic 281. Literature, Film, and Visual Arts in Russia, 1920–1930
2012-2013 Previous Courses of Instruction

[Slavic 282. Literature, Film, and Visual Art in Contemporary Russia]

*Spanish 243. Foundational Fiction and Film
*Visual and Environmental Studies 270. Proseminar in Film and Visual Studies: History
*Visual and Environmental Studies 271. Proseminar in Film and Visual Studies: Theory
*Visual and Environmental Studies 283. Screens: Media Archaeology and Visual Arts Seminar

Visual and Environmental Studies 287. Cinema and Nation - (New Course)

[*Visual and Environmental Studies 292r. Philosophy and Film: Gilles Deleuze and Stanley Cavell]

*Visual and Environmental Studies 301. Film and Visual Studies Workshop
*Visual and Environmental Studies 310. Reading and Research
*Visual and Environmental Studies 320. Directed Study

[*Visual and Environmental Studies 350hf. Critical Media Practice: Non Fiction Filmmaking Workshop]

Folklore and Mythology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Members of the Standing Committee on Degrees in Folklore and Mythology

Maria Tatar, John L. Loeb Professor of Germanic Languages and Literatures and of Folklore and Mythology (Chair)
David F. Elmer, Associate Professor of the Classics (on leave 2012-13)
Deborah D. Foster, Senior Lecturer on Folklore and Mythology
John T. Hamilton, Professor of Comparative Literature
Michael Herzfeld, Ernest E. Monrad Professor of the Social Sciences (on leave spring term)
Peter Machinist, Hancock Professor of Hebrew and Other Oriental Languages
Catherine McKenna, Margaret Brooks Robinson Professor of Celtic Languages and Literatures (fall term only) (on leave spring term)
Stephen A. Mitchell, Professor of Scandinavian and Folklore (on leave spring term)
Gregory Nagy, Francis Jones Professor of Classical Greek Literature and Professor of Comparative Literature
Kimberley C. Patton, Professor of the Comparative and Historical Study of Religion (Divinity School)
Michael J. Puett, Walter C. Klein Professor of Chinese History
Panagiotis Roilos, George Seferis Professor of Modern Greek Studies and of Comparative

641
Literature
James R. Russell, Mashtots Professor of Armenian Studies
Jan Ziolkowski, Arthur Kingsley Porter Professor of Medieval Latin

Other Faculty Offering Instruction in Folklore and Mythology

Felicity A. Lufkin, Lecturer on Folklore and Mythology

Tutorials in Folklore and Mythology

Primarily for Undergraduates

Please note that Culture and Belief 16 (formerly Folklore and Mythology 100). Performance, Tradition and Cultural Studies: An Introduction to Folklore and Mythology is required for the concentration.

[*Folklore and Mythology 90h. Hero and Trickster]*
Catalog Number: 18681 Enrollment: Limited to 12. For undergraduates only.
Deborah D. Foster
Half course (fall term). Hours to be arranged.
Human imagination has conjured two enduring mythic characters that create habitable worlds for people in stories from cultures all over the world. Sometimes branded Hero, sometimes Trickster, these two share traits and antics, yet they seem to endorse fundamentally different values. This seminar examines both hero and trickster in several cultural contexts, comparing them with each other and with their correlates worldwide, primarily in oral traditions, but also where each has migrated to other media.
*Note:* Expected to be given in 2013–14.

*Folklore and Mythology 90i (formerly Aesthetic and Interpretive Understanding 27).*
Fairy Tales and Fantasy Literature
Catalog Number: 4852 Enrollment: Limited to 28.
Maria Tatar
Half course (spring term). W. 2-4, and a weekly section to be arranged. EXAM GROUP: 7, 8
Traces the migration of traditional tales from communal storytelling circles into the literary culture of childhood and into new media. How are powerful cultural myths about innocence and seduction, monstrosity and compassion, or hospitality and hostility recycled in fairy-tale fashion? How do fantasy worlds - both utopian and dystopic - provide children with portals for exploring counterfactuals and worst-case scenarios? Authors include the Brothers Grimm, Andersen, Lewis Carroll, J.M. Barrie, and J.K. Rowling.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for either Aesthetic and Interpretive Understanding or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.
*Folklore and Mythology 91r. Supervised Reading and Research
Catalog Number: 2425
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Instruction and direction of reading on material not treated in regular courses of instruction; special work on topics in folklore, mythology, and oral literature. Normally available only to concentrators in Folklore and Mythology.
Note: Applicants must consult the Chairman or the Head Tutor of the Committee. The signature of the Chairman or the Head Tutor is required.

*Folklore and Mythology 96r. Senior Projects
Catalog Number: 70593
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Designed for seniors completing their (non-thesis) senior project to meet the requirement for the concentration’s senior project option. Students must secure the written approval for the project from the faculty member with whom they wish to work as well as the signature of the Head Tutor. May be repeated with the permission of the Head Tutor.

*Folklore and Mythology 97. Fieldwork and Ethnography in Folklore
Catalog Number: 3789 Enrollment: Limited to 12.
Deborah D. Foster
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Introduces concentrators to the study of traditions - their performance, collection, representation and interpretation. Both ethnographic and theoretical readings serve as the material for class discussion and the foundation for experimental fieldwork projects.
Note: Required of all, and limited to, concentrators.

*Folklore and Mythology 98a. History and Theory of Folklore and Mythology
Catalog Number: 5039
Maria Tatar
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
The development of folklore and mythology as fields of study, with particular attention to the methodological approaches suited to their areas of enquiry. Attends to the study of folklore and mythology in the 19th and early 20th centuries, but focuses especially on theoretical contributions to the study of folklore, mythology, and oral literature in recent decades. Stories will be paired with methodologies.
Note: Required of all, and limited to, concentrators.

*Folklore and Mythology 98b. Tutorial — Junior Year
Catalog Number: 3685
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Required of all concentrators. The signature of the Head Tutor or Chairman of the Committee on Degrees in Folklore and Mythology required. Normally taken in the second term of the junior year.
*Folklore and Mythology 99. Tutorial — Senior Year*
Catalog Number: 3886
Deborah D. Foster and members of the Committee
Full course. Hours to be arranged.
Note: Required of all thesis writers. The signature of the Head Tutor or Chairman of the Committee on Degrees in Folklore and Mythology required. Graded Sat/Unsat.

**Folklore and Mythology Courses**

Please consult our cross-listings for other courses that may be counted for Folklore & Mythology concentration credit. Interested freshmen in particular should be aware of Freshman Seminar 32s. The Twilight of the Gods: Ragnarök and the Apocalyptic Tradition, and Freshman Seminar 32v. The Art of Storytelling. Upperclassmen should be aware of Literature 162. Theory and Methods in Comparative Oral Traditions: Seminar; Religion 17. Myth in History: An Introduction to Religion and to the Study of Religion; Religion 18. Realms of Power: Animals in Religion I; Indian Studies 219. Introduction to World Mythology; and others taught by Folklore & Mythology committee members.

**For Undergraduates and Graduates**

*Folklore and Mythology 114. Embodied Expression/Expressive Body: Dance in Cultural Context*
Catalog Number: 7982 Enrollment: Limited to 16.
Deborah D. Foster
Half course (fall term). Th., 1–3:30. EXAM GROUP: 15, 16, 17
An examination of the ways in which the dancing body internalizes and communicates cultural knowledge to both dancer and observer. By participating in dance workshops, watching dance performances (live and on film), and reading ethnographic and theoretical texts, we attempt to understand the emergent meaning of dance performances from multiple perspectives.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief and the Core area requirement for Literature and Arts B.

*Folklore and Mythology 167. Charms, Rituals and Speech Acts: Theories of Magic in Performance - (New Course)*
Catalog Number: 69831 Enrollment: Limited to 12.
Stephen A. Mitchell
Half course (fall term). F., 10–12. EXAM GROUP: 3, 4
Examines charm magic, an utterance simultaneously a command, an appeal, an embodiment of belief, a literary form, a reference to tradition, and a window onto the past. Using all available resources (e.g., charm texts, trial records, material evidence of magical practices) in analyzing the heterologous European magical materials, this course examines the vexed history of ‘magic’ as a scholarly category, theories of magic, and historical evidence of charm magic, with an emphasis on northern Europe.

[Folklore and Mythology 170. Folk Art in the Modern World]
Catalog Number: 1278
Felicity A. Lufkin

Half course (fall term). Hours to be arranged.
Folk art is a world-wide phenomenon, with a lasting importance to modern culture and to national identities. But what are the commonalities and variations in how folk art is defined, what types are prized, and how is it studied, perpetuated, and preserved?

Note: Expected to be given in 2013–14.

[Folklore and Mythology 171. Chinese New Year Pictures: Folk Art and Visual Culture]
Catalog Number: 0485
Felicity A. Lufkin

Half course (spring term). Hours to be arranged.
The colorful woodcut prints now commonly known as New Year pictures or nianhua are one of China’s best known folk arts, thriving into the 20th c. We will look at how these prints were made and distributed, the roles they played in everyday life, and what they can tell us about the interactions of high and low, rural and urban, and tradition and modernity within Chinese culture and art.

Note: Expected to be given in 2013–14.

Folklore and Mythology 172. Quilts and Quiltmaking
Catalog Number: 33788
Felicity A. Lufkin

Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Are quilts the great American (folk) art? From intricately stitched whole-cloth quilts, to the improvisational patchworks of Gee’s Bend; from the graphic simplicity of Amish quilts to the cozy pastels of depression-era quilts; from the Aids Quilt to art quilts; quilts have taken on extraordinary significance in American culture. This class surveys the evolution of quilt-making as a social practice, considering the role of quilts in articulations of gender, ethnic, class and religious identities, and their positions within discourses of domesticity, technology, consumerism, and cultural hierarchy.

Folklore and Mythology 174. Chinese Folk Arts
Catalog Number: 81667
Felicity A. Lufkin

Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This course will introduce several types of Chinese (visual) folk art. We will consider them comparatively, and pay special attention to the position of folk art in contemporary Chinese society.

*Folklore and Mythology 191r. Supervised Reading and Research
Catalog Number: 3255
Deborah D. Foster and members of the Committee

Half course (fall term; repeated spring term). Hours to be arranged.
Advanced reading in topics not covered in regular courses.

Cross-listed Courses
Aesthetic and Interpretive Understanding 39 (formerly Chinese Literature 150). Old Tales for New Times: The Appropriation of Folklore in Modern and Contemporary China
African and African American Studies 142. Hiphop and Don’t Stop: Education and Know-the-Ledge
African and African American Studies 182. From R & B to Neo Soul: Black Popular Music and Cultural Transformation
African and African American Studies 187. African Religions
Akkadian 141r (formerly Ancient Near East 141r). Akkadian Myths and Epics
Ancient Near East 102. Introduction to Mesopotamian Religion
Anthropology 1158. Maya Narratives: Gods, Lords, and Courts
Anthropology 1640. Language and Culture
Anthropology 1995 (formerly Social Analysis 70). Food, Culture, and Society
Anthropology 1996. Angels, Ghosts, and Hustlers: Bangkok Live
Anthropology 2062. Religions of Latin America
Armenian 120. Armenian Magical Texts
Armenian Studies 100. Armenian Epic
Celtic 101. The Hero of Irish Myth and Saga
Celtic 103. Celts: People or Myth?
Celtic 106. The Folklore of Gaelic Scotland
Celtic 109. The Finn Cycle
Celtic 114. Early Irish Historical Tales
Celtic 137. Celtic Mythology
Celtic 138. Mabinogion: Narrative Traditions of Medieval Wales
Celtic 184. The Táin
Celtic 194. Celtic Bards and Their Poems
Classical Philology 218. Dionysos: Texts and Images - (New Course)
Culture and Belief 11. Medicine and the Body in East Asia and in Europe
Culture and Belief 16 (formerly Folklore and Mythology 100). Performance, Tradition and Cultural Studies: An Introduction to Folklore and Mythology
Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes—Culture, History, and Beliefs in Andean South America
Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization
Culture and Belief 26 (formerly Foreign Cultures 81). The Culture of Everyday Life in China
Culture and Belief 28. Hindu Worlds of Art and Culture
Culture and Belief 32. Back Roads to Far Places: Literature of Journey and Quest
Culture and Belief 35. Classical Mythology
Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the Culture of Medieval Rus'
Culture and Belief 40 (formerly Foreign Cultures 67). Popular Culture and Modern China
English 111. Epic - (New Course)
*Freshman Seminar 32v. The Art of Storytelling
German 235. Storytelling Cultures: The Brothers Grimm and Hans Christian Andersen  
Japanese History 126. Shinto: Conference Course  
*Literature 121. 1001 Nights: Adaptations, Transformations and Translations*  
[Literature 125. The Desire for Narrative: Across Cultures, Forms and Media]  
[Literature 152. Epic and Opera]  
[Literature 162 (formerly *Comparative Literature 207). Theory and Methods in  
Comparative Oral Traditions: Seminar]  
[Literature 166 (formerly Comparative Literature 166). The Comic Tradition in Jewish  
Culture]

Modern Greek 145 (formerly Comparative Literature 145). Dreams and Literature  
Religion 1010. The Deep: Purity, Danger, and Metamorphosis  
[Religion 1042. Religious Tourism]  
*Religion 1095. Ritualization, Play, and Transitional Phenomena - (New Course)*  
*Religion 1305. Emerging Topics in Greek Religion*  
[Scandinavian 150. The Vikings and the Nordic Heroic Tradition]  
[Scandinavian 160a. Old Norse Language, Literature, and Culture: The Viking Legacy]  
[Scandinavian 160br. Old Norse Language, Literature, and Culture: Mythology]  
*Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!*  
South Asian Studies 124 (formerly Indian Studies 124). Introduction to World Mythology  
Spanish 70a. Heroes, Rogues, and Significant Others: Voices from Medieval and Early  
Modern Spain  
[Sumerian 141. Sumerian Myths and Epics]  
[Welsh 227. Seminar: Welsh Bardic Poetry]

**Germanic Languages and Literatures**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Department of Germanic Languages and Literatures*

Judith Ryan, Robert K. and Dale J. Weary Professor of German and Comparative Literature  
(*Chair, Director of Graduate Studies*)  
Daniel James Bowles, College Fellow in the Department of Germanic Languages and Literatures  
Peter J. Burgard, Professor of German (*Director of Graduate Studies-fall term*) (on leave spring term)  
Ursula Lindqvist, Preceptor in Scandinavian  
Charles P. Lutcavage, Senior Preceptor in German  
Stephen A. Mitchell, Professor of Scandinavian and Folklore (on leave spring term)
Lisa Caroline Parkes, Senior Preceptor in German (*Director of Undergraduate Studies-spring term*)

Eric Rentzschler, Arthur Kingsley Porter Professor of Germanic Languages and Literatures

Maria Tatar, John L. Loeb Professor of Germanic Languages and Literatures and of Folklore and Mythology

Markus Wilczek, Associate Professor of Germanic Languages and Literatures (*Director of Undergraduate Studies-fall term*) (*on leave spring term*)

**Other Faculty Offering Instruction in the Department of Germanic Languages and Literatures**

Joseph C. Harris, Francis Lee Higginson Professor of English Literature and Professor of Folklore, Emeritus

Jay Jasanoff, Diebold Professor of Indo-European Linguistics and Philology

Graduate students in the Faculty of Arts and Sciences may enroll in certain foreign language courses for the grade of Satisfactory/Unsatisfactory. Students should consult with course heads to determine if a course is offered on that basis.

For more information on the Department, please visit [www.fas.harvard.edu/~german](http://www.fas.harvard.edu/~german).

**German**

**Primarily for Undergraduates**

The placement test in German is offered during Freshman Week and during Intersession.

**German A. Beginning German**

Catalog Number: 4294

*Lisa Parkes and members of the Department*

**Full course (indivisible). M. through Th., sections at 9, 10, or 11. EXAM GROUP: 2, 11**

An introduction to German language and culture designed for students with little or no knowledge of the language. Encompasses all four skills: speaking, listening, reading, and writing. Class sessions emphasize the development of oral proficiency. Instruction is supplemented by literary and non-literary texts, videos, and Internet activities.

*Note:* The first half of this course may not be taken as a half course for credit toward the AB degree; there are no exceptions to this rule. May not be taken Pass/Fail. Not open to auditors.

**German Ax. German for Reading Knowledge**

Catalog Number: 7177

*Daniel Bowles*

**Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16**

Development of reading proficiency for students with little or no knowledge of German. Emphasizes translation of academic German prose into English.

*Note:* Not open to auditors.
German Bab. Beginning German (Intensive)
Catalog Number: 8629
Lisa Parkes and members of the Department
Full course (fall term; repeated spring term). Fall: M. through F., at 9, and an additional hour to be arranged. Spring: M. through F., at 9 or 12, and an additional hour to be arranged. EXAM GROUP: 2, 11
A complete first-year course in one term for students with no knowledge of German. Provides an introduction to German language and culture encompassing all four skills: speaking, listening, reading, and writing. Class sessions emphasize the development of oral proficiency. Instruction is supplemented by literary and non-literary texts, videos, and Internet activities.
Note: May not be taken Pass/Fail. Not open to auditors.

German Ca. Intermediate German: Speaking, Listening Comprehension, Reading, and Writing
Catalog Number: 5779
Lisa Parkes and members of the Department
Half course (fall term). M. through Th., at 9; M. through Th., at 10. EXAM GROUP: 2, 11
Aims at enhancing students’ proficiency in all four skills, with special emphasis on speaking/discussion. The course also offers a thorough grammar review. Course materials consist of literary and non-literary texts and films that address a broad range of cultural topics.
Note: Conducted in German. May not be taken Pass/Fail. Not open to auditors.

Prerequisite: German Ca or permission of the instructor.

German Cb. Intermediate German: Speaking, Listening Comprehension, Reading, and Writing
Catalog Number: 2608
Lisa Parkes and members of the Department
Half course (spring term). M. through Th., at 9; M. through Th., at 12. EXAM GROUP: 2, 11
Continuation of German Ca. Discussion materials include literary and non-literary texts and film. Emphasis on speaking proficiency and on strengthening writing skills. Course includes a review of selected grammatical structures and exercises in vocabulary building.
Note: Conducted in German. May not be taken Pass/Fail. Not open to auditors.

German Dab. Intermediate German (Intensive): Speaking, Listening Comprehension, Reading, and Writing
Catalog Number: 1351
Lisa Parkes and members of the Department
Full course (fall term; repeated spring term). M., W., F., at 12; Tu., Th., 1–3. EXAM GROUP: 5
A complete second-year course in one term for students with a basic knowledge of German. Focuses on enhancing students’ proficiency in all four skill areas with special emphasis on speaking/discussion. Extensive vocabulary-building exercises, a thorough grammar review, and an introduction to various cultural topics of the German-speaking countries through the use of literary and non-literary texts, Internet, multimedia resources, and film.
Note: Conducted in German. May not be taken Pass/Fail. Not open to auditors.
Prerequisite: German A, German Bab, a score of 450 or above on the Harvard placement test, or permission of the instructor.
**German 50. German Drama and Theater**  
Catalog Number: 59998  
Lisa Parkes  
*Half course (spring term). M., W., at 4. EXAM GROUP: 9*

This course focuses on the full production of a German play. Introduction to performance theories and practices and intensive pronunciation practice. Students participate on stage and collaborate on different aspects of the production, including costumes, set, sound, and program. Two performances take place at the end of the term.  
*Note:* Conducted in German.  
*Prerequisite:* German C (or equivalent), German 115, or permission of the instructor.

**German 61. Advanced Grammar and Reading**  
Catalog Number: 5179  
Peter J. Burgard  
*Half course (fall term). Tu., Th., 10–11:30; Tu., Th., 11:30–1. EXAM GROUP: 12, 13*

Advanced instruction in German through systematic study of the rules of grammar, their nuances, and their exceptions. Application of this knowledge through readings of short selections of sophisticated texts (Goethe, Kant, Kleist, Heine, Marx, Nietzsche, Kafka, Mann) prepares students for courses and academic work requiring advanced German reading comprehension. Further application through writing exercises.  
*Note:* Conducted in German. Not open to auditors.  
*Prerequisite:* German C, equivalent preparation, or permission of the instructor.

**German 62. Advanced Conversation and Composition - Berlin Stories**  
Catalog Number: 2201  
Lisa Parkes  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

Framed as a composition and conversation workshop, this course explores the city of Berlin through literary, filmic, and personal narratives. Besides practicing the rhetorical strategies of various written and spoken genres, students will broaden and refine their vocabulary and idiom, become sensitized to different registers, as well as refine points of grammar.  
*Note:* Conducted in German.  
*Prerequisite:* German 61, equivalent preparation, or permission of the instructor.

**German 65. Wirtschaftsdeutsch**  
Catalog Number: 2678  
Charles P. Lutcavage  
*Half course (fall term). M., W., F., at 11. EXAM GROUP: 4*

Communication, reading, and writing skills for a business environment. Attention to grammar and specialized vocabulary, as well as cultural and political issues relevant to conducting business in German-speaking countries. Writing practice includes business correspondence and job applications. Supplemented by articles from the German-language press, the Internet, and videos.  
*Note:* Conducted in German. May not be taken Pass/Fail. Not open to auditors.  
*Prerequisite:* German Cb, equivalent preparation, or permission of the instructor.
**German 66. Deutschland und Europa**  
Catalog Number: 6537  
Charles P. Lutcavage  
*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*
An advanced language course focusing on current events in Germany and the European Union.  
Readings, discussions, and projects based on a variety of contemporary political, social, economic, and cultural topics. Materials from various sources, including the German-language press, the Internet, videos, and television news.  
*Note:* Conducted in German. May not be taken Pass/Fail. Not open to auditors.  
*Prerequisite:* German 61, German 62, German 65, or permission of the instructor.

**German 71. German Literature from Goethe to Nietzsche**  
Catalog Number: 3213  
Markus Wilczek  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
Through close readings of central texts from the Age of Goethe to the late 19th century, this course introduces students to key concepts of literary analysis. Readings include Goethe, Schiller, Kleist, Hoffmann, Büchner, Heine, Fontane, and Nietzsche.  
*Note:* Readings and discussions in German. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.  
*Prerequisite:* German 61, equivalent preparation, or permission of the instructor.

**German 72. German Literature from Kafka to Jelinek**  
Catalog Number: 5412  
Daniel Bowles  
*Half course (spring term). Tu., Th., 11:30–1; Tu., 6–9 p.m. EXAM GROUP: 13, 14*
The course focuses on central texts in 20th-century German literature. Readings include works by Freud, Rilke, Kafka, Brecht, Celan, Bachmann, Bernhard, Jelinek, and Müller. The course provides an historical overview, introduces core concepts in literary analysis, and sharpens German reading and writing skills.  
*Note:* Conducted in German. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.  
*Prerequisite:* German 61, equivalent preparation, or permission of the instructor. German 71 is not a prerequisite for 72.

**German 90r. Dutch Language Tutorial - (New Course)**  
Catalog Number: 91467  
Lisa Caroline Parkes  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Individualized study of a Germanic language not ordinarily taught. Contact hours with language tutor. Emphasis on literacy.  
*Note:* Not open to auditors.

**German 91r. Supervised Reading and Research**  
Catalog Number: 1059  
Markus Wilczek (fall term) and Lisa Caroline Parkes (spring term)**
Half course (fall term; repeated spring term). Hours to be arranged.
Advanced reading in topics not covered in regular courses.
Note: Permission of the Director of Undergraduate Studies is required.

*German 99. Tutorial — Senior Year
Catalog Number: 3286
Lisa Parkes
Full course. Hours to be arranged.
Open to concentrators writing an honors thesis under faculty supervision. Students are expected to enroll for the entire year. Permission of the Director of Undergraduate Studies is required.

Cross-listed Courses

Culture and Belief 53. Sacred and Secular Poetry - (New Course)
Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion
*Folklore and Mythology 90i (formerly Aesthetic and Interpretive Understanding 27).
Fairy Tales and Fantasy Literature
*Freshman Seminar 49p. What If? Alice in Wonderland, Peter Pan, and the Literary Culture of Childhood
[*History 71b. The European Renaissance and Reformation, 1350-1650]
*History 82b. Fin-de-Siècle Vienna
Yiddish A. Elementary Yiddish
Yiddish Ba. Intermediate Yiddish I
Yiddish Bb. Intermediate Yiddish II
[Yiddish Ca. Advanced Yiddish I]
[Yiddish Cb. Advanced Yiddish II]

For Undergraduates and Graduates

[German 115. German Comedy]
Catalog Number: 52703
Lisa Parkes
Half course (fall term). Hours to be arranged.
What provokes laughter in German culture? This course explores the genre of comedy through major dramatists from the 18th to 20th century. Students will study forms, techniques, and theories of comedy and relate each drama to its broader cultural context. Students will also be introduced to performance theory and participate in theatrical workshops. Part of the final project consists of an interpretive presentation from one of the plays.
Note: Expected to be given in 2013–14. Conducted in German.
Prerequisite: German 61, 62, or permission of the instructor.

German 120. Age of Goethe
Catalog Number: 3797
Peter J. Burgard
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Major movements in German literature and thought from the mid-18th to early 19th century: Enlightenment, Sentimentalism, Storm and Stress, Classicism, Romanticism. Readings include Kant, Klopstock, Lessing, Goethe, Lenz, Schiller, Hölderlin, Kleist, Schlegel, Novalis.

Note: Readings in German, discussions in English. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[German 142. Writing to the Point: Short Forms]
Catalog Number: 96052
Markus Wilczek
Half course (spring term). Hours to be arranged.
This course examines ‘brevity’ in aphoristic writings, fragments, and short prose pieces from the Enlightenment to the twentieth century. Readings include Lichtenberg, Goethe, Friedrich Schlegel, Novalis, Nietzsche, Robert Walser, Benn, and Adorno.
Note: Expected to be given in 2014–15. Readings and discussions in German. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

[German 146. Thomas Mann] - (New Course)
Catalog Number: 71081
Peter J. Burgard
Half course (fall term). Hours to be arranged.
Readings and discussion of Thomas Mann’s major works (in translation), including stories such as "Tristan," "Tonio Kröger," "Death in Venice," and "Mario and the Magician," and the novels Buddenbrooks and The Magic Mountain.
Note: Expected to be given in 2013–14. No knowledge of German required. All readings and discussions in English.

[German 147. Nietzsche]
Catalog Number: 6994
Peter J. Burgard
Half course (fall term). Hours to be arranged.
Note: Expected to be given in 2014–15. No knowledge of German required. All readings and discussions in English.

[German 149. Neurosis, Hysteria and the Schizoid - Pathologies of the Subject in Literature and Thought]
Catalog Number: 23583
Oliver Simons
Half course (spring term). Hours to be arranged.
A survey of theories of madness in the 20th century, this course examines inventions and conceptualizations of the “insane” subject in psychoanalysis and otherwise. Particular attention will be paid to the literary history of these pathologies as well as to the creative potential of the unreasonable subject and its exemplary function in literary avantgarde and critical thought.
Theoretical readings include Freud, Lacan, Foucault, Cixous, Kristeva, Deleuze, and Guattari.  
*Note:* Expected to be given in 2013–14. Readings and discussion in English.

**[German 152. Introduction to Cultural Studies]**
Catalog Number: 90212  
*Oliver Simons*

*Half course (spring term). Hours to be arranged.*

Cultural Studies has developed at the intersection of a range of fields, drawing on literary criticism, ethnography, the history of science, media studies, and others. Situating Cultural Studies as an academic discipline, this course examines methods for the analysis of a society’s creation of cultural meaning and knowledge. The course provides an introduction to essential tools and basic concepts for interdisciplinary inquiries in the humanities.  
*Note:* Expected to be given in 2014–15. Readings and discussion in English.

**German 156. From Postwar to Postwall German Cinema - (New Course)**
Catalog Number: 14735  
*Eric Rentschler*

*Half course (fall term). W., 2-4; Film Screening F., 2-5. EXAM GROUP: 7, 8*

The New German Cinema would become internationally prominent during the 1970s. This class will focus on exemplars of the movement and also important films that preceded and followed it, features by Staudte, Fassbinder, Herzog, Kluge, Schlöndorff, von Trotta, Wenders, Dörrie, Tykwer, and Petzold. What meanings do these works (both as single entries and as functions of a collective national ensemble) have for us today? No previous course work in film studies is required or presumed.

**German 171. A Queer Twentieth Century in Literature and Film - (New Course)**
Catalog Number: 22137  
*Daniel Bowles*

*Half course (spring term). W., 3–5; Optional Film Screening, Tu., 6–9 p.m. EXAM GROUP: 8, 9*

Explores the history of queerness through literature and film of the twentieth century. Emphasis on notions of difference and paradigms of queer experience in European and American contexts. Texts include literary works by Musil, Mann, Woolf, Baldwin, Genet, Bachmann, and Vidal and films by Sagan, Schlöndorff, Fassbinder, and Praunheim.  
*Note:* Conducted in English. Readings in English; students with German or French proficiency are encouraged to read texts in the original.

**German 173. The German Colonial Idea - (New Course)**
Catalog Number: 20145  
*Judith Ryan*

*Half course (spring term). M., 4–6. EXAM GROUP: 9*

Tracing the emergence of German colonial aspirations from mid-nineteenth century to nostalgic recollections of the colonies after World War I, the course examines novels, short stories, autobiographical and travel writings, essays, films, propaganda and advertising. These materials are selected to shed light on controversies about key terms such as imperialism, colonialism, decolonization, racism, and genocide. Attention is also paid to the implications of the colonial
past for German society today.

Note: Reading and discussion in English; German concentrators read texts in the original.

[German 181. Heinrich von Kleist or the End of the 18th Century]
Catalog Number: 82859
Oliver Simons
Half course (fall term). Hours to be arranged.
Heinrich von Kleist, one of the most prominent authors around 1800, was a critical reader of his own time; his work marked a turning point in literary history. Through close readings we will analyze the innovative and unique poetic forms of his major works with regard to literary movements of his time, in particular Weimar Classicism and Romanticism.

Note: Expected to be given in 2014–15. Conducted in German.

[German 182. Music and German National Identity]
Catalog Number: 95593
Lisa Parkes
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Introduction to the relationship between 'German' music, history, society and politics. By analyzing texted (vocal) music in various settings - historical, political, filmic, literary - this course revisits important and often controversial moments in musical history that have shaped German cultural and national identity. Musical genres include the Lied, folk song, the choral symphony, opera, cabaret, post-war popular music, and contemporary hip-hop.

Note: Reading and listening in German and English; discussion in German. An ability to read musical notation is not required.

[German 190. Literature and Violence in the 20th Century]
Catalog Number: 7128
Oliver Simons
Half course (fall term). Hours to be arranged.
Examines how literature reflects violence, but also how violence stimulates new aesthetics throughout the 20th century. Authors include Jünger, Kafka, Müller, Artaud. Close readings of their texts will be accompanied by discussions of theoretical reflections on violence: Freud, Benjamin, Girard and others.

Note: Expected to be given in 2014–15. Most readings in German. Discussions in German.

Cross-listed Courses

*Folklore and Mythology 167. Charms, Rituals and Speech Acts: Theories of Magic in Performance - (New Course)

[History 1167 (formerly Historical Study B-18). The Protestant Reformation]

History of Art and Architecture 154g. Dutch Art of the Golden Age

[*History of Art and Architecture 176m. Berlin & Moscow, 1918/1933 : Proseminar]

Linguistics 168. Introduction to Germanic Linguistics

Primarily for Graduates
[German 210. Baroque]
Catalog Number: 8078
Peter J. Burgard
Half course (fall term). Hours to be arranged.
Examines the literature of the German Baroque and the art of the European Baroque. Focuses on questions of systems, identity, and excess in poetry, drama, narrative, architecture, painting, and sculpture.
Note: Expected to be given in 2013–14. Readings in German, discussions in English.

[German 221. Goethe: Seminar]
Catalog Number: 76159
Peter J. Burgard
Half course (spring term). Hours to be arranged.
Examines selected major works, including poetry, dramas, novels, and essays on art, literature, and science.
Note: Expected to be given in 2014–15. Readings in German, discussions in English.

[German 226r. Theories of Literature: Proseminar]
Catalog Number: 1364
Oliver Simons
Half course (fall term). Hours to be arranged.
Hermeneutics, structuralism, discourse analysis, deconstruction, and gender theory are among the approaches to literature examined for their points of contact and divergence. Attention is also paid to the problem of "applying" theories to literary analysis.
Note: Expected to be given in 2013–14. Discussions and readings in English.

German 235. Storytelling Cultures: The Brothers Grimm and Hans Christian Andersen
Catalog Number: 29842
Maria Tatar
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Investigates the folk tales collected by the Brothers Grimm and the literary tales written by H. C. Andersen. We will consider the origins of the tales, analyze their staying power, and explore their global reach.
Note: Reading knowledge of German required.

[German 244. Literary and Visual Culture of Weimar Germany]
Catalog Number: 1852
Maria Tatar
Half course (fall term). Hours to be arranged.
Explores literary and artistic production in the years immediately preceding the Weimar Republic up to the Nazi era. Authors include Thomas Mann, Hesse, and Brecht. Films include The Cabinet of Dr. Caligari, Metropolis, and M. We will also focus on drawings and paintings by George Grosz, Otto Dix, and Max Beckmann, as well as on the Dada movement.
Note: Expected to be given in 2013–14.
German 275. From 'Natur' to 'Umwelt': Eco-Critical Approaches to German Literature - (New Course)
Catalog Number: 77868
Markus Wilczek
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
This course probes the viability of current eco-critical approaches to literature in close readings of texts from the seventeenth to twenty-first century. Close attention will be given to the question of how particular themes - such as sustainability, the toxic discourse, biodiversity, nationalism, postcolonial heritage, and the global risk society - are negotiated in literary form. Readings include Grimmelshausen, Albrecht Haller, Lichtenberg, Goethe, Hölderlin, Storm, Fontane, Gerhart Hauptmann, Heiner Müller, Christoph Ransmayr, W. G. Sebald, and Ilija Trojanow.

[German 288. German Novels Since Reunification: Seminar]
Catalog Number: 8467
Judith Ryan
Half course (spring term). Hours to be arranged.
A study of German novels since 1990, viewed within their social and cultural context and against the backdrop of contemporary literary theory. Authors include Beyer, Brussig, Drawert, Hein, Hilbig, Maron, Timm, and Wolf.
Note: Expected to be given in 2013–14. Readings in German, discussions in English.

German 290. Experience and Remembrance in W. G. Sebald: Seminar
Catalog Number: 7036
Judith Ryan
Half course (fall term). W., 4–6. EXAM GROUP: 9
Close study of Sebald’s narrative and poetic works, as well as a selection of his scholarly essays, against the backdrop of recent literary theory.
Note: Readings in German, discussions in English.

Cross-listed Courses

[Comparative Literature 245. Intertextuality]
Comparative Literature 295. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education) - (New Course)
[History 2110. Problems in Late Medieval, Renaissance/Reformation, and Early Modern Europe: Seminar]
[*History of Art and Architecture 272w. Post WW II European Art: Germany]
History of Art and Architecture 275x. Aesthetic Theories from Weimar to Adorno - (New Course)
Visual and Environmental Studies 287. Cinema and Nation - (New Course)

Graduate Courses of Reading and Research

*German 300. Special Reading Programs and Research Problems for Advanced Students
Catalog Number: 3646
Germanic Philology

Primarily for Graduates

Cross-listed Courses

Graduate Courses of Reading and Research

*Germanic Philology 300. Special Reading Programs and Research Problems for Advanced Students
Catalog Number: 1045
Joseph C. Harris 1089 and Jay Jasanoff 1661

Germanic Studies

Primarily for Graduates

Scandinavian Languages

Primarily for Undergraduates

Swedish Aa. Beginning Swedish Language and Literature
Catalog Number: 7438
Ursula Lindqvist
Half course (fall term). M. through Th., at 9. EXAM GROUP: 2, 11
A basic course focusing on listening, speaking, reading, and writing skills. During fall term, pronunciation and listening comprehension will be emphasized, as well as regular writing assignments. Literary, film, music and other cultural texts will be introduced relatively early on. By semester’s end, students will have achieved a basic literacy in everyday Swedish.
Note: Not open to auditors.

Swedish Ab. Beginning Swedish Language and Literature
Catalog Number: 69695
Ursula Lindqvist
Half course (spring term). M. through Th., at 9. EXAM GROUP: 2, 11
Continuation of the basic course focusing on a basic mastery of listening, speaking, reading, and writing skills. During spring term, the emphasis is on more advanced conversation and an exploration of Sweden’s culture and civilization through selected texts and video. By semester’s end, students will be able to carry on conversations in everyday Swedish, read news articles, and write letters and produce substantial creative work.
Note: Not open to auditors.
**Swedish Ba. Intermediate Swedish: Childhood in Swedish Literature and Culture**
Catalog Number: 3104

*Ursula Lindqvist*

*Half course (fall term). Hours to be Arranged. EXAM GROUP: 2, 3*

Sweden and Swedish Finland have produced some of the most translated and beloved works of children’s fiction in the world. In this intermediate Swedish language course, we will review the essentials of Swedish grammar and vocabulary as we explore some of these classic works of children’s fiction, film, and comic books and the aspects of Swedish culture they illuminate. The final project for this class involves producing your own work of children’s fiction or film.

*Note:* Conducted in Swedish. Not open to auditors.

*Prerequisite:* Swedish Ab or equivalent.

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**[Swedish Bbr. Special Topics in Swedish Literature and Culture: The Multi-Ethnic Society]**
Catalog Number: 3405

*Ursula Lindqvist*

*Half course (spring term). Hours to be arranged.*

The multi-ethnic society. These days one-ninth of Sweden’s people are born outside the country. This has led to a new body of literature, film and drama exploring the issues of ethnic, cultural and linguistic identity, especially among second-generation Swedes.


*Prerequisite:* Swedish Ba or equivalent.

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**Scandinavian 90r. Scandinavian Language Tutorial**
Catalog Number: 11972

*Ursula Lindqvist*

*Half course (fall term; repeated spring term). Hours to be arranged.*

Individualized study of a Scandinavian language at the elementary, intermediate and advanced levels. Contact hours with language coach. Emphasis on literacy. Any language not listed as a course is taught under this number.

*Note:* For instruction in languages that are not listed (for example, modern Icelandic or Faroese), please consult Dr. Ursula Lindqvist. Not open to auditors.

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**Scandinavian 90r.a. Danish**
Catalog Number: 91003

*Ursula Lindqvist*

*Half course (fall term; repeated spring term). Hours to be Arranged.*

Individualized study of Danish at the elementary, intermediate and advanced levels. Contact hours with language coach. Emphasis on literacy.

*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult Dr. Ursula Lindqvist for more information. Not open to auditors.

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**Scandinavian 90r.b. Finnish**
Catalog Number: 84802
Ursula Lindqvist
Half course (fall term; repeated spring term). Fall: Tu., Th., at 9.
Individualized study of Finnish at the elementary, intermediate, and advanced levels. Contact hours with a language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult Dr. Ursula Lindqvist for more information. Not open to auditors.

**Scandinavian 90r.c. Norwegian**
Catalog Number: 63494
Ursula Lindqvist
Half course (fall term; repeated spring term). Hours to be Arranged.
Individualized study of Norwegian at the elementary, intermediate and advanced levels. Contact hours with language coach. Emphasis on literacy.
*Note:* This course is offered only when there is demonstrated curricular and academic need on the part of the student. Please consult Dr. Ursula Lindqvist for more information. Not open to auditors.

**Scandinavian Literature and Culture**

*Primarily for Undergraduates*

**Scandinavian 91r. Supervised Reading and Research**
Catalog Number: 7308
Ursula Lindqvist
Half course (fall term; repeated spring term). Hours to be arranged.
Advanced reading in topics not covered in regular courses.
*Note:* Permission of the Director of Undergraduate Studies required.

**Scandinavian 97. Tutorial — Sophomore Year**
Catalog Number: 1592
Ursula Lindqvist
Half course (fall term; repeated spring term). Hours to be arranged.
Group or individual tutorial designed to supplement course work and acquaint students with appropriate analytical methods.
*Note:* Open to concentrators in the Scandinavian option. Permission of the Director of Undergraduate Studies required.

**Scandinavian 98. Tutorial — Junior Year**
Catalog Number: 4255
Ursula Lindqvist
Half course (fall term; repeated spring term). Hours to be arranged.
Group or individual tutorial designed to supplement course work and to develop analytical techniques.
*Note:* Permission of the Director of Undergraduate Studies required.
*Scandinavian 99. Tutorial — Senior Year*
Catalog Number: 5542
Ursula Lindqvist
**Full course. Hours to be arranged.**
Open to concentrators writing an honors thesis under faculty supervision. Students are expected to enroll for the entire year.
**Note:** Permission of the Director of Undergraduate Studies required.

**For Undergraduates and Graduates**

**Scandinavian 115. Nordic Cinema**
Catalog Number: 9052
Ursula Lindqvist
**Half course (spring term). M., W., 12; Film Screening M., 6-9. EXAM GROUP: 5**
The Nordic region has made formidable contributions to world cinema, from the Swedish invasion of Hollywood in the silent film era to Denmark’s Dogma 95 movement. This course instructs students in analyzing films in their Nordic cultural and historical contexts and provides an overview of this regional cinema as art and industry within European film history. Topics will include the silent Golden Age, auteurs Dreyer and Bergman, and transnational and diasporic cinema.
**Note:** All readings in English and all films subtitled in English; students with a knowledge of a Nordic language read those texts in the original. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or for Literature and Arts B, but not both.

[Scandinavian 142. Nordic Theater and Drama]
Catalog Number: 68982
Ursula Lindqvist
**Half course (spring term). Hours to be arranged.**
Two Nordic playwrights, Henrik Ibsen and August Strindberg, are widely considered pioneers of modern drama, and filmmakers Ingmar Bergman and Liv Ullmann have also been celebrated for their work in theater. This course examines the global legacy of these pioneers and the Nordic region’s subsequent innovations in theater and drama. Topics: national romanticism, realism, naturalism, symbolism, expressionism, surrealism, and feminist and diasporic theater. We will study each play as performance as well as text.
**Note:** Expected to be given in 2013–14. All readings and discussions in English.

[Scandinavian 150. The Vikings and the Nordic Heroic Tradition]
Catalog Number: 3974
Stephen A. Mitchell
**Half course (spring term). Hours to be arranged.**
Examines the historical events in Europe A.D. 800 to A.D. 1100, and the resulting heroic legacy in medieval poetry and Icelandic sagas. The course focuses on Viking Age figures as warriors, kings, poets, outlaws and adventurers; pre-Christian religion, the Viking raids and the Norse experience in "Vinland" carefully considered.
**Note:** Expected to be given in 2014–15. All readings and discussions in English. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and
Interpretive Understanding or the Core requirement for Literature and Arts A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[Scandinavian 160a. Old Norse Language, Literature, and Culture: The Viking Legacy]
Catalog Number: 1139 Enrollment: Limited to 12.
Stephen A. Mitchell
Half course (fall term). Hours to be arranged.
Introduction to the language and literary culture of medieval Scandinavia, emphasizing works treating the Viking Age and their valorization of an heroic ideal. In addition to basic language skills, students acquire familiarity with key critical tools of the field. Readings include scaldic poetry, selections from Egils saga and the Vinland sagas, and various runic monuments.
Note: Expected to be given in 2014–15. May be counted toward the Folklore and Mythology 90 requirement.

[Scandinavian 160br. Old Norse Language, Literature, and Culture: Mythology]
Catalog Number: 7588 Enrollment: Limited to 12.
Stephen A. Mitchell
Half course (spring term). Hours to be arranged.
Builds on Scandinavian 160a, continuing the language study and cultural survey of the first term, but now considers mythological texts relating to Viking religious life, mainly selections from the prose and poetic Eddas. Special attention is paid to scholarly tools and debates concerned with the interpretation of these cultural monuments.
Note: Expected to be given in 2014–15. May be counted toward the Folklore and Mythology 90 requirement.
Prerequisite: Scandinavian 160a or equivalent.

*Scandinavian 191r. Supervised Reading and Research
Catalog Number: 6175
Ursula Lindqvist
Half course (fall term; repeated spring term). Hours to be arranged.
Advanced readings in topics not covered in regular courses.

Graduate Courses of Reading and Research

*Scandinavian 300. Special Reading Programs and Research Problems for Advanced Students
Catalog Number: 1708
Stephen A. Mitchell 7056 (on leave spring term)
Half course (fall term; repeated spring term). Hours to be arranged.
Global Health and Health Policy

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Global Health and Health Policy

David M. Cutler, Otto Eckstein Professor of Applied Economics (Co-Chair) (on leave 2012-13)
Paul Farmer, Kolokotrones University Professor of Global Health and Social Medicine (Medical School) (Co-Chair)
Katherine Baicker, Professor of Health Economics (Public Health)
Lisa Faye Berkman, Thomas D. Cabot Professor of Public Policy and of Epidemiology (Public Health)
David E. Bloom, Clarence James Gamble Professor of Economics and Demography (Public Health)
Allan M. Brandt, Amalie Moses Kass Professor of the History of Medicine in the Faculty of Medicine, and Professor of the History of Science in the Faculty of Arts and Sciences (on leave 2012-13)
Daniel P. Carpenter, Allie S. Freed Professor of Government
Colleen M. Cavanaugh, Edward C. Jeffrey Professor of Biology (on leave 2012-13)
Michael Chernew, Professor of Health Care Policy (Medical School)
Nicholas A. Christakis, Professor of Sociology in the Faculty of Arts and Sciences and Professor of Medical Sociology in the Faculty of Medicine
Norman Daniels, Mary B. Saltonstall Professor of Population Ethics and Professor of Ethics and Population Health (Public Health)
David A. Edwards, Gordon McKay Professor of the Practice of Biomedical Engineering (on leave fall term)
Myron Essex, Mary Woodard Lasker Professor of Health Sciences (Public Health)
Susanne J. Goldie, Roger Irving Lee Professor of Public Health (Public Health)
Mary-Jo Del Vecchio Good, Professor of Global Health and Social Medicine (Medical School)
David P. Harrington, Professor of Statistics and Professor of Biostatistics (Public Health)
Daniel L. Hartl, Higgins Professor of Biology
Nancy M. Kane, Professor of Management (Public Health)
Arthur Kleinman, Esther and Sidney Rabb Professor of Anthropology in the Faculty of Arts and Sciences and Professor of Medical Anthropology in the Faculty of Medicine, Harvard College Professor (on leave spring term)
Michael R. Kremer, Gates Professor of Developing Societies
Jennifer Leaning, Francois-Xavier Bagnoud Professor of the Practice of Health and Human Rights (Public Health)
Robert A. Lue, Professor of the Practice of Molecular and Cellular Biology
Erez Manela, Professor of History
Thomas G. McGuire, Professor of Health Economics in the Department of Health Care Policy
(Medical School)
John M. Mugane, Professor of the Practice of African Languages and Cultures and Director of the African Language Program
Joseph P. Newhouse, John D. MacArthur Professor of Health Policy and Management (Kennedy School, Medical School, Public Health)
Charles L. Nunn, Associate Professor of Human Evolutionary Biology (fall term)
Joshua A. Salomon, Professor of Global Health
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of African and African American Studies
David Williams, Florence Sprague Norman and Laura Smart Norman Professor of Public Health in the School of Public Health and Professor of African and African American Studies in the Faculty of Arts and Sciences

**Other Faculty Offering Instruction in Global Health and Health Policy**

The Standing Committee on Global Health and Health Policy promotes expanded and enhanced curricular, research, and advising opportunities to undergraduate students interested in the various aspects of health around the world. This committee coordinates course offerings related to global health and facilitates research opportunities for undergraduates. The committee also coordinates a Secondary Field in Global Health and Health Policy.

Global health and health policy present a fundamentally interdisciplinary set of challenges, including problems in the life sciences, along with economic, political, social, and cultural factors that influence health. Harvard has a deep investment and scholarly capacity in the many areas critical to these challenges. The Committee on Global Health and Health Policy, with its diverse representation from across the Faculty of Arts and Sciences and other Harvard Faculties, provides an entrée to Harvard undergraduates as they explore the significant problems shaping health policy around the world.

**Primarily for Undergraduates**

*Global Health and Health Policy 50 (formerly *Extra-Departmental Courses 187). The Quality of Health Care in America*
Catalog Number: 4832 Enrollment: Limited to 40.
Meredith B. Rosenthal (Public Health) and Ashish Kumar Jha (Public Health)
Half course (spring term). Tu., Th., 4:30-6 and a weekly section to be arranged. EXAM GROUP: 18

Offers information and experiences regarding most important issues and challenges in health care quality. Overview of the dimensions of quality of care, including outcomes, overuse, underuse, variation in practice patterns, errors and threats to patient safety, service flaws, and forms of waste. Each session focuses on one specific issue, exploring patterns of performance, data sources, costs, causes, and remedies. Explores desirable properties of health care systems that perform at high levels in many dimensions of quality.
Note: This course may not be taken for credit by students who have already taken either General Education 187 or Extra-Departmental Courses 187.

*Global Health and Health Policy 60. Negotiation and Conflict Management: From the Interpersonal to the International
Catalog Number: 52527 Enrollment: Limited to 20.
Daniel Louis Shapiro
Half course (fall term). M., 2:30–5:30. EXAM GROUP: 7, 8, 9
Around the world, conflict imposes profound direct and indirect costs on global health, ranging from death and injury to trauma, the loss of social networks, and destabilization of political systems. Rather than focusing on how to address the aftermath of conflict and violence, this course examines ways of preventing destructive conflict. Explores theory, frameworks, and tools developed to negotiate the substantive, emotional, and identity-based dimensions of conflict. Applies the theory to a diversity of real-life negotiations, ranging from interpersonal disputes between friends to international conflicts in the Middle East and elsewhere.
Note: This highly interactive course aims to improve students’ skill in resolving conflicts, and draws on a variety of learning methodologies, including lecture, case simulations, self-reflection exercises, and application of negotiation frameworks to conflicts depicted in movies. Students will have the opportunity to analyze firsthand case narratives of senior-level global leaders who have negotiated serious conflicts; these cases are part of an emerging Global Curriculum on Conflict Management spearheaded by the instructor, the Harvard International Negotiation Program, and the World Economic Forum. May not be taken for credit by students who have already completed Freshman Seminar 45s.

*Global Health and Health Policy 91r. Supervised Reading and Research
Catalog Number: 37977
David M. Cutler 2954 (on leave 2012-13) and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading leading to a long term paper on a topic or topics not covered by regular courses of instruction.
Note: May not be taken Pass/Fail. To enroll in the course, a written proposal and signature of advisor and chair of GHHP Committee is required.

*Global Health and Health Policy 99 (formerly *Government 1597). Research in Global Health and Health Policy
Catalog Number: 2981 Enrollment: Limited.
David M. Cutler
Half course (spring term). Hours to be arranged. EXAM GROUP: 8, 9
Explores research topics and methods that are critical to evaluating current issues in national and global health care policy. Students will develop and execute an original research project that utilizes quantitative or qualitative research approaches to studying a domestic and global health policy topic of their interest. Such topics may include: the elements of health care reform, cost containment, quality measurement and improvement, racial and ethnic disparities in care, politics of health care, comparative health systems, global health, and organizational influences on quality.
Note: This course fulfills the research requirement of the Secondary Field in Global Health and
Health Policy and enrollment is ordinarily limited to seniors in the GHHP Secondary Field. Underclass GHHP students may petition to take the course if all other Secondary Field requirements have been met. Course is primarily taught by graduate students in the PhD in Health Policy program and guest lecturers. May not be taken pass/fail.

**Cross-listed Courses**

For additional courses taught at other Harvard Schools, consult the website for the Secondary Field in Global Health and Health Policy.

**General Education**

* Aesthetic and Interpretive Understanding 50 (formerly Literature 128). Literature and Medicine
  [Culture and Belief 11. Medicine and the Body in East Asia and in Europe]
  [Culture and Belief 34 (formerly Historical Study A-87). Madness and Medicine: Themes in the History of Psychiatry]
* Empirical and Mathematical Reasoning 15 (formerly Quantitative Reasoning 50). Medical Detectives
  [Ethical Reasoning 24. Bioethics]
* Ethical Reasoning 33. Medical Ethics and History - (New Course)
* Science of Living Systems 11. Molecules of Life
* Science of Living Systems 17 (formerly Science B-23). The Human Organism
  [Science of Living Systems 21. Evolutionary Medicine]
* Societies of the World 24. Global Health Challenges: Complexities of Evidence-Based Policy
* Societies of the World 25 (formerly Anthropology 1825). Case Studies in Global Health: Biosocial Perspectives
* United States in the World 11. American Health Care Policy
  [United States in the World 13 (formerly Historical Study A-34). Medicine and Society in America]
* United States in the World 31 (formerly Social Analysis 54). American Society and Public Policy

**Freshman Seminars**

* Freshman Seminar 21s. Germs
* Freshman Seminar 23k. Insights from Narratives of Illness
* Freshman Seminar 23l. Medicine, Law, and Ethics: An Introduction
* Freshman Seminar 23m. Nutrition and Public Health
* Freshman Seminar 24g. A Brief History of Surgery
* Freshman Seminar 24n. Child Health in America
*Freshman Seminar 25e. Autism - (New Course)
*Freshman Seminar 25g. The Impact of Infectious Diseases on History and Society
*Freshman Seminar 25k. You Are What You Eat
*Freshman Seminar 25n. Understanding Psychological Development, Disorder and Treatment: Learning through Literature and Research
*Freshman Seminar 25p. Neurotoxicology: Biological Effects of Environmental Poisons
*Freshman Seminar 25x. Human Brain in Health and Disease: A Neurologist’s Perspective - (New Course)
*Freshman Seminar 25z. Stress and Disease (Biobehavioral Aspects of Health and Disease)
*Freshman Seminar 26u. What is Mental Illness?
*Freshman Seminar 26w. The Biology and Science of Cancer and Its Treatments: From Empiric to Scientific to Humanistic
*Freshman Seminar 27i. Global Health: Comparative Analysis of Healthcare Delivery Systems - (New Course)
*Freshman Seminar 45u. Suicide and Violence: a Public Health Perspective
*Freshman Seminar 48e. Gender, Health, and Mental Health

African and African American Studies

African and African American Studies 189x. Medicine, Culture, and Society - (New Course)
African and African American Studies 197. Poverty, Race, and Health

Applied Mathematics

Applied Mathematics 101. Statistical Inference for Scientists and Engineers

Chemistry and Chemical Biology

Chemistry 101 (formerly Chemistry 201). Organic Synthesis Towards a Genomic Medicine
[*SCRB 185 (formerly *Chemistry 185). Human Disease]

The Classics

Classical Studies 165. Medicine in the Greco-Roman World

Economics

Economics 1123. Introduction to Econometrics
[Economics 1126. Quantitative Methods in Economics]
Economics 1389. Economics of Global Health
Economics 1460. Economics of Health Care Policy

Engineering Sciences
Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis
Biomedical Engineering 125 (formerly Engineering Sciences 130). Tissue Engineering
Biomedical Engineering 130 (formerly Engineering Sciences 149). Neural Control of Movement
Engineering Sciences 6. Environmental Science and Technology
*Engineering Sciences 20. How to Create Things and Have Them Matter
Engineering Sciences 53. Quantitative Physiology as a Basis for Bioengineering
Engineering Sciences 103. Spatial Analysis of Environmental and Social Systems
Engineering Sciences 165. Water Engineering

Environmental Science and Public Policy

*Environmental Science and Public Policy 90j. Environmental Crises and Population Flight
Environmental Science and Public Policy 90t. Environmental Health: Your World and Your Life at Risk

Government

Government 50. Introduction to Political Science Research Methods

History

[*History 87a. Health, Disease, and Ecology in African History]
[History 1702 (formerly History 1923). Violence, Substances and Mental Illness: African Perspectives: Conference Course]

History of Science

History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
[History of Science 112. Health, Medicine and Healing in Medieval and Renaissance Europe]
History of Science 113. Crusades, Plagues and Hospitals: Medicine and Society in the Islamic Middle Ages
History of Science 142. History and Politics of the American Obesity Epidemic - (New Course)
History of Science 146. Introduction to Women’s Bodies in Medicine - (New Course)
History of Science 148. History of Global Health
[History of Science 153. History of Dietetics]
[*History of Science 253. Bioethics, Law, and the Life Sciences ]

Human Evolutionary Biology
Human Evolutionary Biology 1333. Primate Disease Ecology and Global Health
Human Evolutionary Biology 1377. Birth

Life Sciences

Life Sciences 2. Evolutionary Human Physiology and Anatomy
[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]
[Life Sciences 110. A Microbial World]
Life Sciences 120. Global Health Threats

Medical Sciences

BCMP 230. Principles and Practice of Drug Development

Mind, Brain, and Behavior

*Mind, Brain, and Behavior 95. Addiction, Choice, and Motivation

Molecular and Cellular Biology

MCB 169. Molecular and Cellular Immunology
MCB 192. Principles of Drug Discovery and Development

Organismic and Evolutionary Biology

[OEB 123. Biology of Symbiosis]
[OEB 221. Microbial Diversity]
*OEB 290 (formerly *Life Sciences 190r). Microbial Sciences: Chemistry, Ecology and Evolution

Psychology

Psychology 1005. Health Psychology
Psychology 1201. Your Brain on Drugs: Psychopharmacology
Psychology 1803. Vulnerability, Stress, and Mental Health - (New Course)
Psychology 1900. Introduction to Statistics for the Behavioral Sciences

Social Studies

*Social Studies 98kg. The Political Economy of Health in the Developing World
*Social Studies 98nw. Health Care in America - (New Course)

Sociology

*Sociology 98Ha. Sociology of Health
*Sociology 156. Quantitative Methods in Sociology
[Sociology 160. Medicine, Health Policy and Bioethics in Comparative and Global Perspective: Conference Course]
Sociology 165. Inequalities in Health Care
Sociology 190. Life and Death in the US: Medicine and Disease in Social Context

Statistics

Statistics 100. Introduction to Quantitative Methods for the Social Sciences and Humanities
Statistics 101. Introduction to Quantitative Methods for Psychology and the Behavioral Sciences
Statistics 104. Introduction to Quantitative Methods for Economics
Statistics 107. Introduction to Business and Financial Statistics
Statistics 110. Introduction to Probability

Stem Cell and Regenerative Biology

*SCRB 130. Biomedical Entrepreneuring: Turning Ideas into Medicine
SCRB 150 (formerly MCB 150). Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease
*SCRB 167. Stem Cells and Regeneration in the Pathobiology and Treatment of Human Disease
[SCRB 170. Heart Stem Cell Therapeutics: A Case Study for Regenerative Medicine]

Women, Gender, and Sexuality

[*Studies of Women, Gender, and Sexuality 1421. Medical Management of the Female Body]

Government

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Government

Timothy J. Colton, Morris and Anna Feldberg Professor of Government and Russian Studies (Chair)
James E. Alt, Frank G. Thomson Professor of Government
Stephen Daniel Ansolabehere, Professor of Government
Muhammet Ali Bas, Associate Professor of Government
Robert H. Bates, Eaton Professor of the Science of Government and Professor of African and African American Studies (on leave 2012-13)
Eric Beerbohm, Frederick S. Danziger Associate Professor of Government and of Social Studies
Aurel Braun, Visiting Professor of Government
Paul A. Cantor, Visiting Professor of Government
Daniel P. Carpenter, Allie S. Freed Professor of Government
Carlos E. Díaz Rosillo, Lecturer on Government
Jorge I. Domínguez, Antonio Madero Professor for the Study of Mexico
Grzegorz Ekiert, Professor of Government
Ryan Enos, Assistant Professor of Government
Michael Frazer, Associate Professor of Government and of Social Studies
Charles David Freilich, Lecturer on Government
Jeffry Frieden, Stanfield Professor of International Peace
Aaron Garrett, Visiting Associate Professor of Government (Boston University)
Claudine Gay, Professor of Government and of African and African American Studies (Director of Graduate Studies)
Justin Gest, Lecturer on Government and on Sociology
Adam Glynn, Associate Professor of Government (on leave spring term)
Jill Iris Goldenziel, Lecturer on Social Studies, Lecturer on Government
Frances Hagopian, Jorge Paulo Lemann Visiting Associate Professor (University of Notre Dame)
Peter A. Hall, Krupp Foundation Professor of European Studies
Rowena Xiaoqing He, Lecturer on Government
Michael J. Hiscox, Clarence Dillon Professor of International Affairs
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Stanley Hoffmann, Paul and Catherine Buttenwieser University Professor
Nahomi Ichino, Associate Professor of Government
Maxine Isaacs, Lecturer on Government
Torben Iversen, Harold Hitchings Burbank Professor of Political Economy (on leave 2012-13)
Alastair Iain Johnston, Governor James Albert Noe and Linda Noe Laine Professor of China in World Affairs
Robert A. Kagan, Visiting Professor of Government
Gary King, Albert J. Weatherhead III University Professor
Steven R. Levitsky, Professor of Government
Janet Ingram Lewis, College Fellow in the Department of Government
Ofrit Liviatan, Lecturer on Government
Roderick Macfarquhar, Leroy B. Williams Professor of History and Political Science, Emeritus (on leave fall term)
Harvey C. Mansfield, William R. Kenan, Jr. Professor of Government (on leave 2012-13)
Eric M. Nelson, Professor of Government
Gregg Andrew Peeples, Lecturer on Government
Elizabeth J. Perry, Henry Rosovsky Professor of Government
Paul E. Peterson, Henry Shattuck Professor of Government (on leave spring term)
Susan J. Pharr, Edwin O. Reischauer Professor of Japanese Politics
Matthew B. Platt, Assistant Professor of Government
Robert D. Putnam, Peter and Isabel Malkin Professor of Public Policy
Shawn Ling Ramirez, College Fellow in the Department of Government  
Patrick T. Riley, Lecturer on Government  
James Robinson, David Florence Professor of Government  
Michael E. Rosen, Professor of Government  
Stephen P. Rosen, Beton Michael Kaneb Professor of National Security and Military Affairs (on leave fall term)  
Nancy Lipton Rosenblum, Senator Joseph S Clark Professor of Ethics in Politics and Government (on leave 2012-13)  
Pedram Safari, Preceptor in Government  
Michael J. Sandel, Anne T. and Robert M. Bass Professor of Government  
Mary Elise Sarotte, Visiting Professor of Government and of History  
Kenneth A. Shepsle, George D. Markham Professor of Government  
Yumiko Shimabukuro, Lecturer on Government  
Beth A. Simmons, Clarence Dillon Professor of International Affairs  
Prerna Singh, Assistant Professor of Government (on leave 2012-13)  
Theda Skocpol, Victor S. Thomas Professor of Government and Sociology  
James M. Snyder, Leroy B. Williams Professor of History and Political Science (on leave spring term)  
Arthur P. Spirling, John L. Loeb Associate Professor of the Social Sciences  
Sumeeta Srinivasan, Preceptor in Government  
Dennis F. Thompson, Alfred North Whitehead Professor of Political Philosophy in the Faculty of Arts and Sciences and in the John F. Kennedy School of Government, Alfred North Whitehead Professor of Political Philosophy in the Faculty of Arts and Sciences and in the John F. Kennedy School of Government, Emeritus (on leave fall term)  
Dustin Tingley, Assistant Professor of Government  
Richard Tuck, Frank G. Thomson Professor of Government  
Cheryl Brown Welch, Senior Lecturer on Government (Director of Undergraduate Studies)  
Daniel F. Ziblatt, Professor of Government (on leave 2012-13)  

Other Faculty Offering Instruction in the Department of Government

Alberto Abadie, Professor of Public Policy at the John F. Kennedy School of Government (Kennedy School)  
Graham T. Allison, Jr., Douglas Dillon Professor of Government in the John F. Kennedy School of Government (Kennedy School)  
Arthur I. Applbaum, Adams Professor of Political Leadership and Democratic Values at the John F. Kennedy School of Government (Kennedy School)  
Amitabh Chandra, Professor of Public Policy (Kennedy School)  
Nara Dillon, Lecturer on East Asian Languages and Civilizations  
Lee Fleming, Albert J. Weatherhead III Professor of Business Administration (Business School)  
Katie Jane Gallagher, Lecturer on Social Studies  
Guido W. Imbens, Professor of Economics  
Serhii Plokhi, Mykhailo S. Hrushev's'kyi Professor of Ukrainian History  
Roger B. Porter, IBM Professor of Business and Government in the John Fitzgerald Kennedy School of Government (Kennedy School)  
James M. Robins, Mitchell L. and Robin LaFoley Dong Professor of Epidemiology (Public
Health
Donald B. Rubin, John L. Loeb Professor of Statistics
David Sanger, Adjunct Lecturer in Public Policy (Kennedy School)
Lawrence H. Summers, Charles W. Eliot University Professor
Cass Robert Sunstein, Felix Frankfurter Professor of Law (Law School)
Roberto Mangabeira Unger, Roscoe Pound Professor of Law (Law School)
Tyler J. VanderWeele, Associate Professor of Epidemiology (Public Health)
Sidney Verba, Carl H. Pforzheimer University Professor, Emeritus
Stephen Martin Walt, Robert and Renee Belfer Professor of International Affairs at the J. F. K. School of Government (Kennedy School)
Christopher Winship, Diker-Tishman Professor of Sociology (on leave spring term)

A full list of courses that count toward undergraduate concentration is available in the Office of the Director of Undergraduate Studies.

Department of Government course listings are numerically ordered as follows:

10–64: Foundational Courses
91–99: Supervised Reading and Research, Tutorials and Seminars
1000–1029 and 2000–2029: Political Methodology and Formal Theory
1030–1099 and 2030–2099: Political Thought and Its History
1100–1299 and 2100–2299: Comparative Government
1300–1599 and 2300–2599: American Government, Public Law, and Administration
1700–1999 and 2700–2999: International Relations
3000–3999: Graduate Courses of Reading and Research and Dissertation Workshops

Foundational Courses

Primarily for Undergraduates

Government 10. Foundations of Political Theory
Catalog Number: 8836
Eric Beerbohm
Half course (spring term). M., W., at 10; W., at 2; W., at 3; Th., at 9; Th., at 12; F., at 9; W., at 2; W., at 3; W., at 1; W., at 2. EXAM GROUP: 3
This course investigates the central problems of political theory that concern the justification of democracy. Is democratic rule the uniquely just form of collective decision-making? What political institutions best express the democratic values of equality, deliberation, and participation? What are the moral responsibilities of citizens - whose representatives exercise
political power in their name? Is democracy a human right? Readings integrate contemporary work in political philosophy with canonical thinkers, including Plato, Aristotle, Rousseau, and J.S. Mill.

Note: This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

**Government 20. Foundations of Comparative Politics**  
Catalog Number: 6166  
*Steven R. Levitsky*  
Half course (fall term). Tu., Th., at 10 and a weekly section to be arranged. EXAM GROUP: 12  
Provides an introduction to key concepts and theoretical approaches in comparative politics. Major themes include the causes of democratization, economic development, ethnic conflict, and social revolutions; as well as the role of the state, political institutions, and civil society. Examines and critically evaluates different theoretical approaches to politics including modernization, Marxist, cultural, institutionalist, and leadership-centered approaches. Compares cases from Africa, Asia, Europe, Middle East and Latin America to provide students with grounding in the basic tools of comparative analysis.  
Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Social Analysis.

Catalog Number: 0263  
*Stephen Daniel Ansolabehere and Paul E. Peterson*  
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4  
Provides an overview of contemporary American politics, showing how recent changes in elections and media coverage have helped shape key aspects of American government. From the courts, Congress, and the Presidency, to the workings of interest groups and political parties, and, also to the making of public policy, the pressure on political leaders to run permanent campaigns has altered governmental institutions and processes. The course explains how and why.  
Note: This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Social Analysis. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Government 40. International Conflict and Cooperation**  
Catalog Number: 72449  
*Dustin Tingley*  
Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4  
This course is an introduction to the analysis of the causes and character of international conflict and cooperation. Theories of international relations are presented and then applied to historical cases to test those theories of international politics and to expand our understanding of the range of possible forms of international behavior.  
Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study A. This course fulfills
the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Government 50. Introduction to Political Science Research Methods**
Catalog Number: 6500
Arthur P. Spiirling

*Half course (fall term). M., W., at 11. EXAM GROUP: 4*

This class will introduce students to techniques used for research in the study of politics. Students will learn to think systematically about research design and causality, how data and theory fit together, and how to measure the quantities we care about. Students will learn a ‘toolbox’ of methods—including statistical software—that enable them to execute their research plans. This class is highly recommended for those planning to write a senior thesis.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core requirement for Quantitative Reasoning. This course must be taken for letter grade.

**Government 61. Research Practice in Quantitative Methods - (New Course)**
Catalog Number: 52605
Arthur P. Spiirling

*Half course (spring term). Th., 1–3.*

Class introduces students to statistical methods and practice commonly used in political science and likely to be of utility to those undertaking a quantitative methods thesis in Government. Topics will include techniques for dealing with binary or ordinal dependent variables, time series and ‘survival’ models, along with applications of more complicated approaches. Students will learn new statistical software skills, and be expected to both gather and work on their own data throughout the semester.

**Government 62. Research Practice in Qualitative Methods - (New Course)**
Catalog Number: 67712
Frances Hagopian (University of Notre Dame)

*Half course (spring term). W., 2–4; Th., at 2; Th., at 3. EXAM GROUP: 7, 8*

With the goal of preparing students to undertake original research, this course introduces students to basic principles and tools of qualitative research in the social sciences. Focus is on comparative research design and the principal tools of qualitative research. Topics examined include the pitfalls of selection bias, the logic of causal inference, measurement and conceptualization, and the potential of mixed methods. Research techniques covered are process tracing, analytic narratives, natural experiments, archival research, interviews, and ethnography.

**Government 63. Recent Political Theory: Topics and Resources - (New Course)**
Catalog Number: 37498
Michael E. Rosen

*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*

An exploration of some central themes of recent work in English-language political philosophy, including Rawls and his critics, egalitarianism, and the nature of rights. Other topics will reflect the individual interests of students who enroll. This course is designed to help participants to
make the transition from being critical readers of political thought to being independent contributors to debate.

Tutorials and Seminars

*Government 91r. Supervised Reading and Research
Catalog Number: 2444
Cheryl Brown Welch
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading leading to a term paper in a topic or topics not covered by regular courses of instruction.
Note: Limited to juniors and seniors. Does not count for concentration credit. Offered at the discretion of the individual instructors. Written proposal and signature of Director of Undergraduate Studies required.

Government 92r. Faculty Research Assistant - (New Course)
Catalog Number: 35789
Cheryl Brown Welch 6070, and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.

Government 94. Undergraduate Seminars

*Government 94al. Global Distributive Justice
Catalog Number: 14091 Enrollment: Limited to 16.
Katie Jane Gallagher
Half course (spring term). F., 11–1. EXAM GROUP: 4, 5
This course examines how concerns about socio-economic justice apply beyond the limits of the domestic state. Do we have reason to care about equality at the international level? If so, should we care about the relative standing of individuals, or of nation-states? Who, if anyone, is responsible for addressing global inequalities? Topics covered include the moral relevance of borders, natural resource distribution, immigration policy, climate change, the international status of women, and global institutional design.

*Government 94at. Nationalism: Theory and Practice - (New Course)
Catalog Number: 77215 Enrollment: Limited to 12.
Cheryl Brown Welch and members of the Department.
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
The seminar examines the theoretical arguments made for and against certain variants of ‘nationalism’ and explores cases in which appeals to nationalism are made in international and domestic politics today. We will consider whether nationalism can be emancipatory by looking at cases of national self-determination and secession, as well as minorities within states today. Is nationalism compatible with liberalism? Are all variants of nationalism ‘dangerous’? How relevant is nationalism in a globalized world?
**Government 94ch. Tactics & Ethics - (New Course)**
Catalog Number: 81876 Enrollment: Limited to 12.
Cheryl Brown Welch and members of the Department.
Half course (spring term). W., 7–9 p.m. EXAM GROUP: 9
What is the relationship between moral ideals and political action? Do everyday moral standards apply to politics — or do some demands of politics supersede "normal" morality? What actions, if any, are never justified? This course explores questions of political ethics — violence, obedience, disobedience, the relationship between political means and ends — through the writings of philosophers and activists including Plato, Machiavelli, Thoreau, Weber, Gandhi, Arendt, Camus, King, and Havel.

**Government 94da. Democracy, Alienation, and Muslims in the West**
Catalog Number: 71687 Enrollment: Limited to 16.
Justin Gest
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This seminar develops an in-depth understanding of modern democratic citizenship and political identity, examining Western Muslim communities as an evocative case study. We first consider the shifting foundations of democratic participation and political alienation in a globalizing world. We then illustrate new developments by exploring the experiences of Muslim communities’ in Western democratic polities. Finally, these concepts and observations are applied to understand three contemporary socio-political phenomena - global Islam, transnational Muslim politics, and terrorist networks.

**Government 94dn. Mapping Social and Environmental Space**
Catalog Number: 2017 Enrollment: Limited to 16.
Sumeeta Srinivasan
Half course (fall term). Th., 1–3.
This seminar will use mapping as a methodological technique to examine social and environmental issues. Students will be expected to use mapping software to examine spatial data for a location and topic of their choice for their final paper. Weekly discussions will be conducted in class on various mapping related topics. References will range from books like "How to lie with Maps" to current journal articles examining the use of GIS in social science.

**Government 94ef. Black Politics in the Post Civil Rights Era**
Catalog Number: 3345 Enrollment: Limited to 16.
Claudine Gay
Course examines shift among African Americans from protest to politics. Emphasis is on development and use of political resources as the means to achieve policy objectives in the post-Civil Rights Era. Beginning with 1965 Voting Rights Act, course will explore the issues, opportunities, and challenges that have defined African American political life in the last forty years, as well as the attitudes and debates that have shaped efforts to increase African American influence over the political process.

**Government 94ek. Globalization and Private Governance**
Catalog Number: 13525 Enrollment: Limited to 16.
Michael J. Hiscox  
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*

This research seminar examines the impact of globalization on labor and environmental standards in developing nations. Topics include: the rules of the World Trade Organization and various preferential trade agreements, including NAFTA, and how these affect regulatory standards set by governments; the effects of corporate social responsibility (CSR) measures, including corporate codes of conduct; the effectiveness of activist campaigns, and; the impact of voluntary certification and labeling schemes such as Fair Trade.

*Government 94fg. Presidents, Governors, and Mayors: Chief Executive Power in Comparative Perspective*  
Catalog Number: 8598 Enrollment: Limited to 16.  
Carlos E. Díaz Rosillo  
*Half course (spring term). W., 7–9 p.m. EXAM GROUP: 9*

Analyzes the foundation, development, and exercise of chief executive power at the national, state, and local levels of government in the United States. Examines the applicability of different political science theories of presidential power to the broader exercise of chief executive power. Explores the sources and limits of executive authority, the roles and responsibilities of political chief executives at different levels of government, and the way in which institutions affect the exercise of chief executive power.

[*Government 94fh. Politics at the Grassroots: Rights, Resources, and Democratic Equality in Brazil*]  
Catalog Number: 35399 Enrollment: Limited to 16.  
Frances Hagopian (University of Notre Dame)  
*Half course (spring term). Hours to be arranged.*

Introduces students to researching politics and society in Latin America’s largest and most unequal country through an examination of an array of grassroots movements and initiatives organized to redress inequality, including women’s, landless, environmental, and religious movements; racial quotas, and participatory budgeting experiments. Seminar focuses on citizenship rights under neoliberalism and how social movements intersect with formal political institutions, political parties, and unions and other organizations to reorder the national political and policy agendas.

*Note:* Expected to be given in 2013–14.

*Government 94fp. The Military Instrument of Foreign Policy - (New Course)*  
Catalog Number: 38494 Enrollment: Limited to 16.  
Aurel Braun  
*Half course (fall term). W., 2–4.*

This seminar analyzes the relationship of military force to politics. Nuclear war and deterrence, conventional war, revolutionary war and counter-insurgency are examined from the perspectives of the U.S., Russia, China and other contemporary military powers. The aim of this course is to help acquaint students of international relations with the vital importance of the military instrument in the formulation and implementation of foreign policy and in the functioning of the international system.
*Government 94gl. Inhuman Wrongs: Crimes Against Humanity in Theory, Politics, and Law*
Catalog Number: 5106 Enrollment: Limited to 16.
Cheryl Brown Welch
*Half course (fall term). M., 2–4.*
After considering some analytical perspectives on extraordinary cruelty in modern political thought-on abuses whose wrongness has been called "morally overdetermined"—we turn to nineteenth-century cases of scandals against humanity: slavery, extermination, barbarous warfare. We then trace the legalization of the metaphor of a crime against humanity in the twentieth century and consider contemporary debates about how to prevent, punish, or repair inhuman wrongs.

*Government 94go (formerly *Government 90go). Religion & Politics: American Exceptionalism, European Secularism?*
Catalog Number: 19501 Enrollment: Limited to 12.
Cheryl Brown Welch and members of the Department
*Half course (spring term). Th., 4–6.*
Contrary to what proponents of the secularization thesis predicted, religion has not lost its political salience in the developed world. Not only do "old" cleavages still matter, but new political fault lines continue to be drawn along dimensions of religious belief and identity. In this course we will examine the broad theoretical contours of religion’s role in politics and analyze how religion specifically influences contemporary political discourses in the US and Europe.

*Government 94gs. Globalization and Civil Society*
Catalog Number: 7546 Enrollment: Limited to 16.
Susan J. Pharr
*Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18*
This seminar examines the rise of civil society worldwide and the role civil society organizations play in shaping social, economic, and political realities. It explores the origins of the concept; the relation between civil society and democracy; the complex roles of civil society in developed democracies, in democratic transitions, under conditions of repression, and in transborder advocacy and development. Cases include: U.S., Europe, Japan, Korea, Taiwan, China, and ‘Arab Spring’.

*Government 94gz. International Human Rights: Law and Politics - (New Course)*
Catalog Number: 65876 Enrollment: Limited to 16.
Cheryl Brown Welch and members of the Department.
*Half course (spring term). Tu., 1–3.*
This course explores the political conditions — international and domestic — that influence the creation, acceptance, operation and effectiveness of the international rules governing individual human rights.

*Government 94hk. The Early Development of American Political Institutions and Organizations*
Catalog Number: 51268 Enrollment: Limited to 16.
Daniel P. Carpenter
Survey of developments in the party system, social movements, Congress, the presidency and the bureaucracy from the colonial period through the Civil War. Rise of the two-party system, the mass party and changes in voting rights; congressional committees and their power; building of the Constitution and the federal judiciary; abolitionism and new social movements, the emergence of early bureaucratic institutions, and the presidency -- studied using three theoretical approaches (rational choice, historical institutionalism, and critical theory).

*Government 94hu. Human Rights Scholars Seminar*
Catalog Number: 68777 Enrollment: Limited to 12.
Cheryl Brown Welch and members of the Department
This seminar is open to juniors in any concentration interested in human rights research. During the first half of the semester, we will review key theoretical concepts and discuss various disciplinary approaches to and methodologies for conducting human rights scholarship. During the second half, students will develop and workshop a research prospectus on a human rights topic in which they are interested. Preference will be given to students intending on writing a senior thesis.
Note: Preference given to juniors considering writing a senior thesis on human rights related topic (from all concentrations) or engaged in a serious research project on a human rights topic

*Government 94ia. Sino-US Relations in an Era of Rising Chinese Power*
Catalog Number: 9006 Enrollment: Limited to 16.
Alastair Iain Johnston
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Assesses theoretical arguments and empirical evidence concerning the implications of Chinese economic and military modernization for conflict and cooperation between China and the US. Some issues examined include global arms control, trade, the environment, and regional security.

*Government 94jg. Beyond Authoritarianism in the Middle East - (New Course)*
Catalog Number: 63171 Enrollment: Limited to 16.
Cheryl Welch and members of the Department
Half course (fall term). F., 10–12.
This course explores Middle Eastern authoritarianism, its decline, and its aftermath. While the course will primarily focus on the Middle East, we will draw in comparative readings from other countries that have undergone transitions -- successful or unsuccessful -- from authoritarianism.

*Government 94lv. Law and Theory after 9/11 - (New Course)*
Catalog Number: 87184 Enrollment: Limited to 12.
Cheryl Brown Welch and members of the Department.
Half course (fall term). M., 10–12.
The 9/11 attacks cast a long shadow. The premise of this course is that we still live in that shadow, and that we have a consequent obligation to understand the world we now inhabit. In this seminar we will consult a range of materials, from court cases to OLC opinion letters to contemporary political theory, in order to map the legal landscape of the War on Terror and to critically examine its conceptual foundations: secrecy, emergency, and national security.
*Government 94lw. Security and Development Interventions in Fragile States - (New Course)*
Catalog Number: 35662 Enrollment: Limited to 16.  
*Cheryl Brown Welch and members of the Department.*  
*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*  
Why and how do developed states intervene in fragile states with the aim of bringing about stability and/or economic development? We will first examine dominant theories of state weakness as well as several security and development phenomena that arise in fragile states, such as political violence and poverty. The majority of the course will then study the theory and practice of foreign humanitarian interventions that seek to address these phenomena — particularly military intervention, peacekeeping and various types of economic aid. We will also consider methods for evaluating these interventions’ effectiveness.

[*Government 94mb. Rationalist Sources of International Conflict and War*]
Catalog Number: 98991 Enrollment: Limited to 16.  
*Muhammet Ali Bas*  
*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*  
How do we explain war and peace among states? Why do states resort to violent means and fight costly wars in international relations? In answering these fundamental questions, this seminar will examine theories that focus on strategic interaction of rational actors in international politics.  
*Note:* Expected to be given in 2013–14.

*Government 94mg. The Politics of Immigration*
Catalog Number: 20165 Enrollment: Limited to 16.  
*Justin Gest*  
*Half course (fall term). W., 2–4.*  
This seminar examines the challenges posed by global migration and the political responses of local communities. We first consider the history of migration, and theoretical understandings that attempt to explain the dynamics of migration, border control and integration. We next engage in a variety of policy debates about migrants and their inclusion, labor, rights, families, and legal status. We then apply this knowledge to four contemporary case studies which showcase divergent histories and approaches to immigration.

*Government 94ms. Contemporary European International Relations: Responding to the Past, Reshaping the Present - (New Course)*
Catalog Number: 99751 Enrollment: Limited to 16.  
*Mary Elise Sarotte*  
*Half course (spring term). W., 4–6.*  
Contemporary European international relations represent an on-going attempt to overcome the damage done by events of the recent past. This seminar explores Europe’s tragic path through the twentieth century, the bloodiest century ever. It examines Europe’s subsequent Nobel Prize-winning efforts to create new forms of governance and relations among European states and the world at large. Finally, the class investigates twenty-first century challenges for the Eurozone, dealings with Russia, and transatlantic and global politics.
*Government 94nm. Race and Representation*
Catalog Number: 1424 Enrollment: Limited to 16.
Matthew B. Platt
This course explores the fundamental question of whether black members of Congress provide the highest potential quality of representation for their black constituents. Beginning with Reconstruction and continuing throughout the present Congress, we chart how the nature of black representation has changed in accordance with broader changes among black Americans themselves.

*Government 94oa. Inequality and American Democracy*
Catalog Number: 2053 Enrollment: Limited to 16.
Theda Skocpol
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
The "rights revolutions" of the 1960s and 1970s removed barriers to full citizenship for African Americans, women, and other formerly marginalized groups. But inequalities of wealth and income have grown since the 1970s. How do changing social and economic inequalities influence American democracy? This seminar explores empirical research and normative debates about political participation, about government responsiveness to citizen preferences, and about the impact of public policies on social opportunity and citizen participation.

*Government 94of. Law and Politics in Multicultural Democracies*
Catalog Number: 14911 Enrollment: Limited to 16.
Ofrit Liviatan
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Examines the role of law in the governance of cultural diversity drawing on examples from the USA, Western Europe, India and Israel. Central themes at the intersection of law and politics will be explored, including: the impact of courts on rights protections, law’s function as a venue of conflict resolution, and courts’ relationship with other political institutions. Specific attention will be given to contemporary controversies such as Islamic veiling, abortion and same sex marriage.

*Government 94pr. Constitutionalism and the Principles of Democratic Government - (New Course)*
Catalog Number: 10858 Enrollment: Limited to 12.
Cheryl Welch and members of the Department
Half course (spring term). W., 4–6.
This course studies some of the most common features of the constitutional arrangements characterizing liberal democratic regimes, with the aim of better understanding the relationship between constitutionalism and democratic politics. Topics covered include federalism, separation of powers, judicial interpretation, and fundamental freedoms such as those of speech, equal protection and property. Readings draw on historical discussions, caselaw, and contemporary legal scholarship. Students who are considering writing a thesis in American government or constitutional politics are strongly encouraged to take this seminar.
*Government 94q. US-Latin American Relations: Seminar*
Catalog Number: 5153 Enrollment: Limited to 16.
*Jorge I. Domínguez*
A study of political and economic relations between the United States and Latin American countries, and of the international relations of Latin America since 1960. Attention also given to foreign policy decision making in the US and Latin America, and to alternative approaches to the study of international relations and foreign policy.
Note: This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Social Analysis.

*Government 94qa. Community in America*
Catalog Number: 4941 Enrollment: Limited to 16.
*Robert D. Putnam*
Has the social fabric of America’s communities and the civic engagement of its citizens changed over the last generation? Why? Does it matter? What lessons might we find in American history? These questions are at the focus of this seminar.

*Government 94sh. Feminist Perspectives on Justice and Oppression - (New Course)*
Catalog Number: 48064 Enrollment: Limited to 12.
*Cheryl Welch and members of the Department*
Half course (fall term). Tu., 10–12.
This seminar provides an overview of feminist contributions to political thought. It asks what the concept of gender adds to debates about justice and equality, as well as to the social scientific study of politics. We consider the main currents of liberal, radical, socialist, and postmodern feminism; how gender intersects with other socially and politically constructed categories such as race, class, sexual orientation, nationality, and culture; and the status of feminist arguments in contemporary politics.

*Government 94sl. Cycles of War and Peace*
Catalog Number: 52322 Enrollment: Limited to 16.
*Shawn Ling Ramirez*
Half course (spring term). W., 4–6.
This research seminar engages students in the theoretical and conceptual literature on conflict and peacemaking with applications to contemporary conflicts. It is intended for students preparing to write senior honors theses. The course covers four topics: the causes of conflict, the organization of violence, the institutionalization of war, and bargaining for peace through diplomacy and intervention. Students will work on group projects, and write individual research papers that bridge theory with evidence and research design.

*Government 94sp (formerly *Government 90sp). Future of War*
Catalog Number: 6012 Enrollment: Limited to 16.
*Stephen P. Rosen*
Examine the character and implications of political and technological factors that could affect the future conduct of war.

*Government 94ss. Women & U.S. Politics - (New Course)*
Catalog Number: 88693 Enrollment: Limited to 12.
*Cheryl Brown Welch and members of the Department.*
*Half course (spring term).* M., 4–6. EXAM GROUP: 9
Do American women and men differ in their political opinions and behavior? Do women lead differently than their male counterparts as legislators, executives, and judges? Given that women vote at a rate equal or higher than men, why do they continue to be underrepresented as officeholders? This seminar will explore the role of women in current U.S. political processes and institutions.

*[Government 94us. U.S. Elections] - (New Course)*
Catalog Number: 36121 Enrollment: Limited to 16.
*Stephen Daniel Ansolabehere*
*Half course (spring term).* Tu., 9–11.
**Note:** Expected to be given in 2013–14.

*Government 94za. Power - (New Course)*
Catalog Number: 19675 Enrollment: Limited to 12.
*Cheryl Brown Welch and members of the Department.*
*Half course (spring term).* Tu., 6–8 p.m. EXAM GROUP: 18
What is power? How should we conceptualize it? How should we go about studying it? This course introduces students to various ways of answering these questions. Readings are drawn from political theory, and from a variety of empirical disciplines, including political science, sociology, anthropology, and psychology.

*Government 94zg (formerly *Government 98zg). Ethnic Politics and Conflict*
Catalog Number: 96589 Enrollment: Limited to 16.
*Cheryl Brown Welch and members of the Department*
*Half course (fall term).* Tu., 6–8 p.m.
What are ethnic groups? How are they relevant to politics? And what are the consequences of ethnicity on political outcomes such as distribution of public goods, voting, and violence? This course probes these questions by examining some of both the classics and cutting edge research on ethnic politics, with the aim of preparing students to conduct their own research projects.

*Tutorials*

*Government 97. Tutorial — Sophomore Year*
Catalog Number: 3023
*Michael E. Rosen and James E. Alt*
*Half course (spring term).* M., 2-3:30, and tutorial sections to be arranged. EXAM GROUP: 7, 8
This one-semester course is designed to provide all Government Department concentrators with a unified and challenging intellectual experience in the study of politics. The course covers a
selection of topics on the theme of "Democracy" and draws on materials ranging from classics in political theory to cutting edge research in the discipline today.

*Government 99r, Tutorial — Senior Year
Catalog Number: 3652
Cheryl Brown Welch and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Taken as two half courses by those who have elected the honors program and in order to write their senior theses.
Prerequisite: Two half courses of Government 94.

Cross-listed Courses

East Asian Studies 98b. Junior Tutorial--Japan and the World
East Asian Studies 98d. Junior Tutorial--The Political Economy of Modern China
East Asian Studies 121. Global Cities in East Asia

Political Methodology and Formal Theory

For Undergraduates and Graduates

*Government 1000. Quantitative Methods for Political Science I
Catalog Number: 3990
Adam Glynn
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
An introduction to statistical research in political science with a focus on applied multiple linear regression.
Note: Frequently taken by graduate students satisfying department requirements. Also open to qualified undergraduates. This course, when taken for a letter grade, meets the Core requirement for Quantitative Reasoning.
Prerequisite: Gov. 50, or equivalent, or permission of the instructor.

Government 1002. Advanced Quantitative Political Methodology
Catalog Number: 0181
Gary King
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Introduces theories of inference underlying most statistical methods and how new approaches are developed. Examples include discrete choice, event counts, durations, missing data, ecological inference, time-series cross sectional analysis, compositional data, causal inference, and others.
Prerequisite: Government 2000 or the equivalent.

Government 1008. Introduction to Geographical Information Systems
Catalog Number: 9732
Sumeeta Srinivasan
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course introduces Geographical Information Systems and their applications. GIS is a
combination of software and hardware with capabilities for manipulating, analyzing and
displaying spatially referenced information. The course will meet two times a week. Every week,
there will be a lecture and discussion as well as a laboratory exercise where students will work
with GIS software on the computer.
Note: No prerequisites.

**Government 1009. Advanced Geographical Information Systems Workshop**
Catalog Number: 8150
Sumeeta Srinivasan
*Half course (spring term). M., W., at 10. EXAM GROUP: 3*
This course is a workshop for students who have taken the introductory Geographical
Information Systems course and want to explore detailed applications. The course will meet two
times a week for a lecture and a laboratory exercise.

**Government 1016. Spatial Models for Social and Environmental Policy**
Catalog Number: 0737
Sumeeta Srinivasan
*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*
Introduces the fundamental statistical and mapping tools needed for analysis of environmental
and social policy. Topics are linked by environmental and social themes and include spatial
statistics; surface estimation; raster algebra; suitability modeling and remote sensing. Students
acquire technical skills in both mapping and spatial models. Software packages used include
STARS - Space-Time Analysis of Regional Systems, GeoVISTA, ArcGIS, Geoda and
MULTISPEC.
*Prerequisite: Some prior experience with GIS and knowledge of basic statistics.*

**Government 1019 (formerly Government 1119). Basic Mathematics for Social Scientists**
Catalog Number: 0989
Pedram Safari
*Half course (fall term). M., W., F., at 11.*
The aim of this course is to provide the students of social sciences with a conceptual
understanding of the basic notions of calculus and matrix algebra.

**Government 1020. Intermediate Mathematics for Social Scientists**
Catalog Number: 7487
Pedram Safari
*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*
This course is geared toward graduate students of social sciences (such as government,
education, psychology, etc.). The focus is on a conceptual understanding of vector calculus and
probability, as well as applications.

**Cross-listed Courses**

**Empirical and Mathematical Reasoning 13 (formerly Social Analysis 46). Analyzing Politics**
**Primarily for Graduates**

*Government 2000. Introduction to Quantitative Methods I*
Catalog Number: 2281
*Adam Glynn*
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Graduate-level version of Government 1000. Meets with Government 1000, an introduction to statistical research in political science with a focus on applied linear regression. Will require extra homework and examination problems in addition to those for Government 1000.
**Prerequisite:** Permission of the instructor for anyone other than Government Department graduate students.

*Government 2000e. Introduction to Quantitative Methods I*
Catalog Number: 36268
*Adam Glynn*
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Essential elements of Gov. 2000. Meets with Government 2000 and provides an introduction to statistical research in political science with a focus on applied linear regression. Some of the statistical computing from Government 2000 will not be required.
**Prerequisite:** Permission of the instructor required for anyone other than Government Department graduate students.

Catalog Number: 8941
*Gary King*
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Graduate-level version of Gov. 1002. Meets with Gov. 1002, introduces theories of inference underlying most statistical methods and how new approaches are developed. Examples include discrete choice, event counts, durations, missing data, ecological inference, time-series cross sectional analysis, compositional data, causal inference, and others. Will require extra homework and examination problems in addition to those for Gov. 1002.
**Prerequisite:** Government 2000 or the equivalent.

**Government 2002. Topics in Quantitative Methods**
Catalog Number: 8168
*Adam Glynn and Arthur P. Spirling*
Half course (fall term). Th., 10–12. EXAM GROUP: 12, 13
Will cover topics of general interest to political methodology: causal inference, graphical models, mixed methods, contest modeling, text-as-data, item response. Illustrates how ideas and methods from these areas can be applied to substantive questions.
**Prerequisite:** Government 2000 and Government 2001, or equivalent, or permission of the instructor.

**Government 2005. Formal Political Theory I**
Catalog Number: 1719
*James M. Snyder*
Half course (fall term). Tu., 10–12; . EXAM GROUP: 12, 13
A graduate seminar on microeconomic modeling, covering price theory, decision theory, social choice theory, and game theory.

**Government 2006. Formal Models of Domestic Politics**
Catalog Number: 5487
*James Robinson*

**Half course (spring term).** Th., 2–4.
An understanding of introductory game theory and basic mathematical tools is required. Topics covered include some combination of the following: electoral competition under certainty and uncertainty, special interest politics, veto players, coalitions, delegation, political agency, and regime change.

**Prerequisite:** Government 2005 or permission of instructor

**[Government 2008. Experimental Political Science]***
Catalog Number: 30018
*Ryan Enos and Dustin Tingley*

**Half course (spring term). Hours to be arranged.**
Experimentation is increasingly used by political and other social scientists to help identify causal relationships. This class will cover arguments for and against the use of experiments, as well as a broad cross-section of foundational and cutting edge experiments in political science and allied fields. In particular, we will cover the use of survey experiments, field experiments, and lab experiments. Substantive applications will span the sub-fields as well as integrate work from experimental economics and psychology.

**Note:** Expected to be given in 2014–15. Open to qualified undergraduates with permission of instructors.

**[Government 2009. Methods of Political Analysis ]***
Catalog Number: 1080 Enrollment: Limited to 15.
*Peter A. Hall*

**Half course (spring term).** Th., 4–6. EXAM GROUP: 18
Covers the issues and techniques central to designing and researching a good dissertation, whether quantitative or qualitative, including principles of research design, case selection, comparison, measurement, and causal relations, with many practical examples.

**Note:** Expected to be given in 2013–14. Open to all doctoral students, regardless of year, and to advanced undergraduates.

**Government 2010. Strategies for Political Inquiry**
Catalog Number: 7421
*Michael J. Hiscox and Nahomi Ichino*

**Half course (fall term).** M., 10–12. EXAM GROUP: 3, 4
Research design for causal inference in qualitative and quantitative studies. Topics covered include measurement, conceptualization, case studies, the relationship between large-n and small-n studies, process-tracing, surveys, field experiments, and natural experiments, with examples of their use in political science.
Political Thought and Its History

For Undergraduates and Graduates

Government 1052. History and Freedom in German Idealism
Catalog Number: 3628
Michael E. Rosen
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
The high period of German Idealism (from 1781, the date of the publication of Kant’s Critique of Pure Reason, to the death of Hegel in 1831) is one of the most revolutionary in the history of philosophy. We shall study the period using the central ideas of history and freedom as our guide and trace how modern ideas regarding freedom, the self, and the historical character of knowledge have their origins in the Idealists’ thought.

Government 1060. Ancient and Medieval Political Philosophy
Catalog Number: 4978
Aaron Garrett (Boston University)
Half course (fall term). Tu., Th., at 10. EXAM GROUP: 12
Classical and medieval political philosophy, from Plato to Thomas Aquinas, with special attention to the question of natural right.
Note: This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

Government 1061. The History of Modern Political Philosophy
Catalog Number: 5035
Richard Tuck
Half course (spring term). Tu., Th., at 10 plus weekly section. Grad section scheduled Thurs 11am-12pm. EXAM GROUP: 12
Political philosophy from Machiavelli to Nietzsche, with attention to the rise and complex history of the idea of modernity.
Note: This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

Catalog Number: 91765
Michael Frazer
Half course (fall term). Hours to be arranged.
This course is intended to help students think critically about the controversial ethical questions which are being debated in American politics today. We will weigh both sides of arguments over such issues as economic redistribution, the rights of women and racial minorities, the political status of the family, the regulation of the beginning and end of life, and the conduct of foreign policy.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the
General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

**Government 1074. Political Thought of the American Founding**
Catalog Number: 71248
*Eric M. Nelson*

*Half course (spring term). Tu., Th., at 11; sections TBA. EXAM GROUP: 13*

John Adams observed that the American Revolution took place, not on the battlefield, but rather "in the minds of the people...before a drop of blood was shed at Lexington." This course will examine the political debates leading to American independence, and, later to the ratification of the Federal Constitution. Famous works of the period, such as Paine’s Common Sense and The Federalist, will be placed in the wider context of American political writing from 1763 to 1789.

[Government 1082. What is Property?]
Catalog Number: 2723
*Eric M. Nelson*

*Half course (fall term). Hours to be arranged.*

This course will investigate the major theories of property in the Western political tradition and address such key questions as: How do we come to own things? What claims do others have on the things we own? Is the community the ultimate owner of all goods? Do property rights really exist, and, if so, what is their source? Readings will include the Bible, Plato, Aristotle, Cicero, More, Harrington, Locke, Marx, and Nozick.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Moral Reasoning.

**Government 1087. Shakespeare and Politics - (New Course)**
Catalog Number: 22391
*Paul A. Cantor*

*Half course (fall term). Tu., Th., 2–3:30; EXAM GROUP: 16, 17*

A study of the relationship between the political regime and human character in Shakespeare’s plays, beginning with the Roman Republic and contrasting it with later regimes, including Christian monarchy and the Venetian Republic. Readings include Coriolanus, Julius Caesar, Antony and Cleopatra, The Merchant of Venice, Henry V, Hamlet, Othello, and Macbeth (with background reading in political theorists such as Machiavelli).

**Government 1092. Progressive Alternatives: Institutional Reconstruction Today**
Catalog Number: 6197
*R roberto Mangabeira Unger (Law School)*

*Half course (spring term). Tu. 1-3, and a weekly section to be arranged. EXAM GROUP: 15, 16*

The past and future agenda of progressives, whether liberals or leftists. What should they propose now that they no longer believe that governmental direction of the economy works or that redistributive social programs suffice? A basic concern is the relation of programmatic thought to the understanding of change and constraint. The course explores institutional alternatives in contemporary societies, and reconsiders the traditions of social theory and political philosophy in the light of an interest in such alternatives.

*Note:* Extended take-home examination. Offered jointly with the Law School as 2391.
Catalog Number: 4613 Enrollment: May be limited.

Michael J. Sandel and Douglas A. Melton
Half course (spring term). Hours to be arranged.

Explores the moral, political, and scientific implications of new developments in biotechnology. Does science give us the power to alter human nature? If so, how should we exercise this power? The course examines the science and ethics of stem cell research, human cloning, sex selection, genetic engineering, eugenics, genetic discrimination, and human-animal hybrids.

Note: Expected to be given in 2013–14. May not be taken concurrently with LS 60. May not be taken for credit if LS 60 has already been taken. Ethical Reasoning 22 (Justice) is recommended as a background. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

Cross-listed Courses

Note: These courses do not satisfy the political theory field requirement in Government except Ethical Reasoning 22 and Ethical Reasoning 16.

Ethical Reasoning 11. Human Rights: A Philosophical Introduction
Ethical Reasoning 22 (formerly Moral Reasoning 22). Justice
Ethical Reasoning 30. The Just World
Ethical Reasoning 34. Liberty - (New Course)

[*History 73a. Republics and Republicanism]*
[History 1323. German Social Thought, Nietzsche to Habermas]*
[History 1324. French Social Thought]*
[*History 1325 (formerly *History 83f). Political Theology: Conference Course]*
[History 1326. The Frankfurt School and Religion: Conference Course]*
[History 1350. Theories of Secularization: Conference Course]*

Primarily for Graduates

*Government 2030. Political Concepts: Field Seminar*
Catalog Number: 0551 Enrollment: Open to PhD students in Government and in Philosophy, and to other qualified students by permission of the instructor
Arthur I. Applbaum (Kennedy School)
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
A thematic exploration of important normative concepts such as freedom, equality, justice, legitimacy, obligation and democracy. Readings are drawn largely from contemporary scholarship.

*Government 2031. Hume, Smith and Kant* - (New Course)
Catalog Number: 14276
Instructor to be determined
Half course (spring term). Hours to be arranged.
A reading of the major moral, political and economic writings of David Hume, Adam Smith and
Immanuel Kant.
Note: Expected to be given in 2013–14.

*Government 2034. Ethics Economics, and Law
Catalog Number: 4652
Michael J. Sandel
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Explores controversies about the use of markets and market reasoning in areas such as organ sales, procreation, environmental regulation, military service, voting, health care, education, and criminal justice. The seminar will examine arguments for and against cost-benefit analysis, the monetary valuation of life and the risk of death, and the use of economic reasoning in public policy and law.
Note: Offered jointly with the Law School as LAW - 2076. Meets at the Law School. Open to GSAS students with permission of the instructor.

Government 2056. Political Thought of the English Revolution
Catalog Number: 5107
Eric M. Nelson
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
This course will survey the remarkable range of political responses to the English constitutional crisis of 1640 to 1660, from theories of divine right to the arguments of the Levellers. Readings will include Filmer, Harrington, Lilburne, Milton, Nedham, Parker, and Sidney. Special attention will be paid to the idiosyncratic perspective of Thomas Hobbes.

Government 2072. Rousseau’s Political Thought - (New Course)
Catalog Number: 72204
Richard Tuck
This course is an opportunity to read through Rousseau’s work on political theory and to discuss his relationship to both earlier and later writers.

[*Government 2080. Topics in Political Philosophy]
Catalog Number: 4345 Enrollment: Limited to 20.
Harvey C. Mansfield
Half course (fall term). Hours to be arranged.
Plato
Note: Expected to be given in 2013–14. Open to qualified undergraduates.

[Government 2088. Ethical Foundations of Political Thought]
Catalog Number: 2378
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Half course (fall term). Hours to be arranged.
This class will cover areas of contemporary moral philosophy (for instance, utilitarianism, freedom, the nature of value, consent, well-being and desert) that are of particular relevance to political theorists.
Note: Expected to be given in 2013–14.
[Government 2094. Kant and Kantianism]
Catalog Number: 55223
Patrick T. Riley
Half course (spring term). Hours to be arranged.
The main political, moral, legal and historical works of Kant (including the three Critiques), plus
Kant-interpretations of Hegel, Marx, Nietzsche, Rawls, Arendt, Korsgaard, Nora O’Neill, etc.
Note: Expected to be given in 2013–14.

*Government 2095. The Nature and Purposes of Political Theory - (New Course)*
Catalog Number: 67585
Michael Frazer
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
This course will explore a variety of competing approaches to political theory, as well as the
relationship between political theory and related fields such as social science, intellectual history
and analytic philosophy.

*Government 2097. Justice as Love and Benevolence (from Plato, Cicero and Augustine to
Shakespeare, Leibniz and Freud)*
Catalog Number: 52088 Enrollment: Open to qualified undergraduates with instructor’s
permission
Patrick T. Riley
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Justice as ‘ascent’ from negative legal forbearance, from harm to doing positive good from ‘wise
love’ and benevolence. Readings from Plato, Cicero, Augustine, Shakespeare (four plays),
Leibniz, Wagner and Freud (Civilization and "Leonardo da Vinci").

[Government 2098. Moral Values in Political Science]
Catalog Number: 23817
Michael Frazer
Half course (spring term). Hours to be arranged.
This course will introduce students of descriptive political science to the subject of normative
theory, exploring the proper place of moral values in social inquiry and addressing a variety of
major ethical-political debates.
Note: Expected to be given in 2013–14.

Cross-listed Courses

Theory]

Comparative Government

For Undergraduates and Graduates

[Government 1100. Political Economy of Development]
Catalog Number: 7687
Robert H. Bates
Half course (fall term). Hours to be arranged.
Comparative analysis of political economy of development drawing on case studies from Africa, Asia, the Middle East, and Latin America.
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Social Analysis.

**[Government 1109. Comparative Institutional Design]**
Catalog Number: 56707
Pippa Norris (Kennedy School)
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Institutional choices are vital for effective peace-building and for strengthening the quality of democratic governance. This course compares: (i) the principles and goals of constitutional design; (ii) the mechanisms of institutional design (electoral rules, parliamentary and presidential executives, decentralization, and minor reforms); (iii) political processes determining institutional choices; and (iv) the consequences (for political behavior, economic performance, regime stability, the quality of governance, democracy and democratization). Materials draw upon global comparisons and selected cases from long-standing and younger liberal democracies, as well as from countries emerging from conflict.
*Note:* Expected to be given in 2013–14.

**[Government 1132. Comparative Political Economy, Developed Countries]**
Catalog Number: 77322
Torben Iversen
Half course (spring term). Hours to be arranged.
This course is a survey of topics and theories in comparative political economy with a focus on developed democracies in Western Europe, North America, and East Asia. The course applies insights from both political science and economics to explain why economic performance, distribution, and economic policies vary across countries. The course complements "Comparative Political Economy, Developing Countries", although one is not a prerequisite for the other.
*Note:* Expected to be given in 2014–15.

**[Government 1170. Nation-Building and Democracy in the Development of Europe]**
Catalog Number: 2585
Daniel F. Ziblatt
Half course (spring term). Hours to be arranged.
The course introduces students to the political development of western and eastern Europe, providing students with key historical context for understanding the challenges of ongoing European integration and enlargement. The main focus will be on the issues of feudalism, state-formation, revolution, industrialization, nationalism, and democracy to explore the origins and consequences of the historic divide between the two halves of Europe.
*Note:* Expected to be given in 2013–14.
**Government 1171** (formerly Societies of the World 32). The Making of Modern Politics: 
The Development of Democracy in Europe from the Middle Ages to the European Union
Catalog Number: 8261
Peter A. Hall
Half course (fall term). Tu., Th., at 1 and a weekly section to be arranged. EXAM GROUP: 15
How are democracies created and why do they collapse? What causes revolution? What were the
consequences of the industrial revolution? What roles do ideas, institutions and interests play in
processes of political change? This course examines the long-term historical developments
behind the creation of modern politics. Focusing on Britain, France, Germany and Italy from the
1600s to the 2000s, it explores the lessons Europe offers for the development of democracy.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for
Societies of the World or the Core area requirement for Historical Study A. This course fulfills
the requirement that one of the eight General Education courses also engage substantially with
Study of the Past.

[*Government 1187. The Political Economy of Europe, Domestic and International
Aspects]*
Catalog Number: 55359
Jacques Mistral
Half course (spring term). M., W., at 11:40. EXAM GROUP: 4, 5
This course intends to decipher the political economy of Europe as a major actor in the world
economy. It is policy oriented and designed to offer a better understanding of European
structures and methods to all those who will have to deal with Europe in the private or public
sectors.
*Note:* Expected to be given in 2013–14. Offered jointly with the Kennedy School as IGA-662.
Meets at HKS.

**Government 1197. The Political Economy of Africa**
Catalog Number: 9130
James Robinson and Nahomi Ichino
Half course (spring term). M., W., at 10; sections TBA. EXAM GROUP: 3
The basic social science literature on Africa’s development. Particular emphasis on political
economy.

**Government 1203. Capitalism and Democracy in Central and Eastern Europe**
Catalog Number: 7078
Grzegorz Ekiert
Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13
General introduction to East European politics focusing on the countries outside the former
Soviet Union. Examines critical periods and dynamics of political and economic changes in the
region from the end of World War I to the recent enlargement of the European Union.

**Government 1243. Russian Politics in Transition**
Catalog Number: 1982
Timothy J. Colton
Half course (fall term). M., W., F., at 1; Tu., at 5. EXAM GROUP: 6
An examination of politics in the Russian Federation since the collapse of Soviet communism, focusing on the factors promoting and impeding the development of a stable democratic regime. Topics include the general dynamics of political and economic transformation, leadership, institution building, political culture, regionalism and federalism, electoral and party politics, state-society relations and interest groups, and Russian nationalism and neo-imperialism.

[**Government 1255. The Politics of India**]
Catalog Number: 57342
**Prerna Singh**
*Half course (fall term). Hours to be arranged.*
This course will introduce students to politics in the world’s largest democracy, focusing on themes both important to India and to a general study of politics in developing countries. How does one make sense of democracy in a poor multi-ethnic setting? How has democratic politics shaped and been shaped by a society divided along a caste, class, linguistic and religious lines? And how well has India fared in promoting economic development, both growth and equity? *Note:* Expected to be given in 2013–14.

[**Government 1270. Government and Politics of Modern Japan**]
Catalog Number: 11288
**Yumiko Shimabukuro**
*Half course (spring term). M., W., at 9. EXAM GROUP: 2*
An introduction to political life in contemporary Japan. Explores the interaction of political parties, the bureaucracy, interest groups, the media and the government, with an emphasis on the ongoing transformation of the Japanese political system. Special attention will be paid to contemporary issues, such as economic policy, social welfare programs, national security, disaster response, and administrative reform.

[**Government 1280. Government and Politics of China**]
Catalog Number: 1643 Enrollment: Approval of instructor is needed for Graduate students to enroll in this course.
**Nara Dillon**
*Half course (fall term). Tu., Th., 1–2:30; . EXAM GROUP: 15, 16*
General introduction to the politics of contemporary China. Basic objectives are to provide a working knowledge of Chinese political programs and practices, and to encourage a critical evaluation of the positive and negative aspects of China’s socialist experiment.

[**Government 1291. The Politics of Social Policy in Brazil**]
Catalog Number: 50506
**Frances Hagopian (University of Notre Dame)**
*Half course (fall term). M., W., at 10; . EXAM GROUP: 3*
Assesses Brazil’s social policy failures and successes, focusing on education, health, social security, and poverty alleviation. Introduces students to Brazil’s political institutions; political and social actors; and state reforms. Identifies factors, including program design, power of privileged groups, and widespread political clientelism in the social services, that have contributed to Brazil’s weak social welfare state and policy failures, and examines changes that have improved social policy outputs and the lingering obstacles to further progress.
Government 1295. Comparative Politics in Latin America
Catalog Number: 4241
Steven R. Levitsky
Half course (spring term). Tu., Th. 10-11:30 and a weekly section TBA. EXAM GROUP: 12, 13
Examines dynamics of political and economic changes in modern Latin America, focusing on Argentina, Brazil, Chile, Cuba, Mexico and Venezuela. Topics include the rise of populism and import-substituting industrialization, revolutions and revolutionary movements, the causes and consequences of military rule, the politics of economic reform, democratic transitions, and democratic consolidation. The course analyzes these phenomena from a variety of different theoretical perspectives, including cultural, dependency, institutionalist, and leadership-centered approaches.
Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Social Analysis.

Cross-listed Courses

[Economics 1340. World Economic History]
[Economics 1370. Media, Democracy and Economics]
Government 1171 (formerly Societies of the World 32). The Making of Modern Politics: The Development of Democracy in Europe from the Middle Ages to the European Union
Religion 1832. Political Islam in the 20th and 21st Centuries
Sociology 164. Successful Societies: Markers and Pathways
The Modern Middle East 120. The Arab Revolutions: popular uprisings and political transformations - (New Course)

Primarily for Graduates

*Government 2105. Comparative Politics: Field Seminar
Catalog Number: 0154
Jorge I. Domínguez and Nahomi Ichino
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Surveys topics in comparative politics (both the developed and the developing world), including the rise of the modern state; institutions of government; interest mediation; democracy and authoritarianism; revolution; political parties; mass and elite political behavior; political economy.
Note: Preference given to FAS Government graduate students.

Catalog Number: 0885
Monica D. Toft (Kennedy School)
Half course (spring term). Tu., Th., at 10:10. EXAM GROUP: 12, 13
This course introduces students to the theoretical and comparative study of civil wars. The course aims to provide students with solid analytical and historical foundations and highlight the policy dilemmas associated with civil wars.
*Government 2127. Popular Protest in Comparative Perspective - (New Course)
Catalog Number: 16063
Grzegorz Ekiert and Elizabeth J. Perry
Half course (spring term). Th., 4–6. EXAM GROUP: 18
This is a graduate seminar which introduces the literature on social movements, revolutions, and contentious politics from a variety of methodological and theoretical perspectives. Cases are drawn from different historical periods and political contexts.

*Government 2136. Political Regimes and Regime Change
Catalog Number: 5702 Enrollment: Limited to 15.
Steven R. Levitsky
This course examines theoretical approaches to democratization, evaluating them in light of historical and contemporary cases. We examine themes such as the relationship of free markets/democracy, the proliferation of hybrid regimes, and authoritarian persistence.
Note: Permission of instructor required for all students.

*Government 2148. Civil Society, West and East
Catalog Number: 4675
Susan J. Pharr and Grzegorz Ekiert
Half course (fall term). Hours to be arranged.
Focusing in particular on European and Asian settings, the seminar examines debates over what civil society is, notions of public space and social capital, and the role of civil society in political transitions.
Note: Expected to be given in 2013–14.
economic policy. Theories from positive political theory and comparative and international political economy are examined and applied to substantive issue areas.

*Government 2160. Politics and Economics*
Catalog Number: 7780 Enrollment: Limited to 15.
*James E. Alt and Torben Iversen*
*Half course (fall term). W., 12–2. EXAM GROUP: 5, 6*
Covers the political economy of policymaking and institutional change. Readings include a mixture of foundational approaches and recent research, covering a variety of methodological perspectives. The topical emphasis is on democracy, accountability, inequality, redistribution, and growth.

Government 2176. Varieties of Capitalism and Social Inequality
Catalog Number: 7083 Enrollment: Open to qualified undergraduates.
*Peter A. Hall*
*Half course (fall term). W., 10–12. EXAM GROUP: 3, 4*
Explores economic and social inequality in the affluent democracies. How do institutional arrangements reconcile efficiency and equality and affect the dynamics of redistribution? How is institutional change best understood? Taught with Kathleen Thelen of MIT.

[Government 2213. Comparative Politics of Post-Socialism]
Catalog Number: 6876
*Timothy J. Colton and Grzegorz Ekiert*
*Half course (spring term). Hours to be arranged.*
A research seminar designed to define an agenda for the comparative analysis of political developments among post-socialist systems. Emphasis placed on the formation of research proposals, methods of analysis, theory-building, and the presentation of comparative empirical research.
*Note: Expected to be given in 2013–14.*

[Government 2218. Topics in Russian Politics]
Catalog Number: 0872
*Timothy J. Colton*
*Half course (spring term). Hours to be arranged.*
A research seminar on selected problems in the politics and government of post-Soviet Russia. Intended for students with some prior study of the subject.
*Note: Expected to be given in 2014–15.*

[Government 2227. The Politics and Economics of Africa]
Catalog Number: 8307 Enrollment: Open to juniors and seniors with permission of instructor.
*Nahomi Ichino*
*Half course (spring term). Hours to be arranged.*
Examines social science research on the politics and political economy of Africa.
*Note: Expected to be given in 2013–14.*
[*Government 2285. Political Science and China]*
Catalog Number: 1566
*Elizabeth J. Perry*

Half course (spring term). Hours to be arranged.
This graduate seminar gives students control over the secondary literature on Chinese politics, with special attention to competing theoretical and methodological approaches.
*Note:* Expected to be given in 2013–14. Requires background in contemporary Chinese history/politics.

**Cross-listed Courses**

[Economics 2328. The Emergence of Modern Economic Growth: A Comparative and Historical Analysis]

**American Government, Public Law and Administration**

**For Undergraduates and Graduates**

[Government 1300. The Politics of Congress]
Catalog Number: 8868
*Stephen Daniel Ansolabehere*

Half course (spring term). Tu., Th., at 9; Th., at 3. EXAM GROUP: 11
A broad survey of the legislative branch of the American government. Topics include committee power, party leadership, rules and procedures, legislative elections, and inter-branch relations.

[Government 1310. Introduction to Congress]
Catalog Number: 33915
Instructor to be determined

Half course (spring term). M., W., at 10. EXAM GROUP: 3
This course seeks to provide students with a comprehensive introduction to Congress. The first half of the course addresses the nuts and bolts of how Congress operates in terms of foundational theories, the committee system, congressional elections, and congressional procedures. In the second half of the course we will apply this knowledge to an exploration of how and why Congress pays attention to certain issues rather than others. Students are encouraged to view Congress not only as an institution unto itself but also as an institution that interacts with a variety of actors to shift public policy.
*Note:* Expected to be given in 2013–14.

Catalog Number: 65711
*Carlos E. Díaz Rosillo*

Half course (spring term). Hours to be arranged.
Analyzes the origins and evolution of presidential power in the United States. Studies the powers of the President and how those powers translate into power. Examines and evaluates the most prominent political science theories, scholarly debates, and public controversies about presidential power. Explores the strategic choices available to modern American presidents in
their efforts to augment the power of the presidency and provide active leadership to the political system.

*Note:* Expected to be given in 2013–14.

**Government 1359. The Road to the White House**

Catalog Number: 0913  
Carlos E. Díaz Rosillo  
*Half course (fall term). M., W., at 12. EXAM GROUP: 5*

Examines the role of presidential campaigns and elections in American politics. Studies the origins and evolution of the presidential nominating and electoral process and explores how modern campaigns inform, influence, and mobilize voters. Topics include the role of political parties and candidates, campaign strategies and issues, political advertisement and media coverage, and campaigning and governing. Special efforts will be made to incorporate major developments in the 2012 campaign with political science research on presidential campaigns and elections.


Catalog Number: 8628  
Claudine Gay  
*Half course (fall term). Hours to be arranged.*

Course examines the nature of public opinion and political participation. Considers how people acquire, organize, and apply their political beliefs; historical and contemporary patterns of public opinion, with emphasis on conflicts of values and social groups; who votes and why; the role of the media and political campaigns in mobilization and in formation of public opinion; and linkage between opinion, participation, and policy, with attention to whether citizens can discharge the responsibilities of democratic citizenship.

*Note:* Expected to be given in 2013–14.

**Government 1368. The Politics of American Education**

Catalog Number: 8971  
Paul E. Peterson  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*

This course examines the politics of education in the United States. It considers the key institutions (e.g. school districts, mayors, states, Congress, and courts) and actors (e.g. elected officials, parents, teachers, interest groups, and the general public) shaping the American K-12 education system in order to understand recent reform efforts and their consequences for students. We will look closely at past conflicts over education governance, ongoing policy challenges, and the forces shaping current reform efforts.

*Note:* Offered jointly with the Kennedy School as SUP 447 (formerly HLE 347).

**Government 1372. Political Psychology**

Catalog Number: 40477  
Ryan Enos  
*Half course (spring term). Tu., Th., 10 to 11:30; sections TBA. EXAM GROUP: 12, 13*

This course examines the psychological mechanisms behind political behaviors and institutions. Topics covered will include voting behavior, campaigns and media, partisanship, political
violence, and racial attitudes. For these and other topics we will not only ask what happens but examine how human psychology makes it happen.

*Government 1499. Inside Government: Topics in Economic, Regulatory, and Legal Policy - (New Course)*
Catalog Number: 80771 Enrollment: Letter of application required. See note below.

*Lawrence H. Summers and Cass Robert Sunstein (Law School)*

*Half course (spring term). W., 5–7 p.m. EXAM GROUP: 9*

This seminar explores policymaking inside the federal government, with particular reference to significant issues confronted in recent years and to the likely shape of future challenges. Students will be asked to write either a series of short papers or a long paper at the end of the semester. Several outside speakers, with substantial high-level government experience, are expected to help lead some of the sessions.

*Note:* Offered jointly with the Kennedy School as BGP 300 and with the Law School as 2548. To apply please email the instructors, with copy to Melissa Proctor, mproctor@jd14.law.harvard.edu. Course meets at the Law School, Wasserstein 3016.

[Government 1510. American Constitutional Law]
Catalog Number: 0383

*Richard H. Fallon (Harvard Law School)*

*Half course (fall term). M., W., 1-2:30. EXAM GROUP: 6, 7*

Provides an introduction to contemporary American constitutional law, with a principal focus on decisions by the Supreme Court of the US. Topics to be studied include freedom of speech and religion, guarantees of due process and equal protection, and the powers of Congress and the courts.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

[Government 1511. The Constitution and the American Political System]
Catalog Number: 90593

*Sanford V. Levinson (University of Texas-Austin)*

*Half course (fall term). Hours to be arranged.*

The course will examine American constitutions regarding both the normative and empirical assumptions they make about political life and the specific kinds of politics they help constitute through the institutions they establish. Although the United States Constitution will inevitably be the central focus, state constitutions will also receive considerable attention, not least because they are often strikingly different from the national constitution and each other. Occasional attention will also be directed at foreign constitutions.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core requirement for Moral Reasoning.

Government 1540. The American Presidency
Catalog Number: 4925

*Roger B. Porter (Kennedy School)*

*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
Course analyzes the development and modern practice of presidential leadership. Examines the institutional presidency, presidential selection, decision making, and the relationship of the presidency with the executive branch, Congress, courts, interest groups, the press and the public. Considers the political resources and constraints influencing the President’s ability to provide leadership in the US political system.  
*Note:* Offered jointly with the Kennedy School as DPI-115. Meets at FAS.

**Cross-listed Courses**

**Environmental Science and Public Policy 78, Environmental Politics**  
[United States in the World 15 (formerly Social Analysis 66). Is the American Racial Order Being Transformed?]  
[United States in the World 18. Thinking About the Constitution]  
**United States in the World 20 (formerly Moral Reasoning 74). The Theory and Practice of Republican Government**  
**United States in the World 31 (formerly Social Analysis 54). American Society and Public Policy**

**Primarily for Graduates**

**Government 2305. American Government and Politics: Field Seminar**  
Catalog Number: 2305  
*Jennifer L. Hochschild and Ryan Enos*  
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8  
Designed to acquaint PhD candidates in Government with a variety of approaches that have proved useful in examining important topics in the study of American government and politics.

**Government 2310. Social Capital and Public Affairs: Research Seminar**  
Catalog Number: 7051  
*Robert D. Putnam*  
Half course (fall term). Th., 4–6. EXAM GROUP: 18  
Topics in the relationship between politics and civil society in the US.  
*Note:* Offered jointly with the Kennedy School as DPI-360. Meets at the Kennedy School.

**Government 2328. Electoral Politics**  
Catalog Number: 76072 Enrollment: Open to qualified undergraduates with permission of instructor.  
*Stephen Daniel Ansolabehere and James M. Snyder*  
Half course (fall term). Th., 2–4.  
This seminar examines the politics of US elections, with emphasis on theoretical models of electoral competition and empirical research of voting behavior and election outcomes. The first third of the seminar examines voter behavior, the second third of the seminar electoral competition among parties and candidates and aggregate election results, and the final third of the seminar examines electoral institutions and laws. Specific topics include party competition, incumbency advantages, electoral districts, campaign finance, issue and economic voting, and electoral accountability.
Note: Understanding of statistics strongly recommended. Open to qualified undergraduates with permission of instructor.
Prerequisite: Understanding of statistics strongly recommended.

**Government 2340a. Proseminar on Inequality and Social Policy I**
Catalog Number: 93024  
Half course (fall term). Hours to be arranged.  
Considers effects of varied political activities on creating or reducing inequality in U.S., and at effects of inequality on political activity and policy choices. Examines electoral participation, social movements, lawmaking, etc. on policies like education, ERA, welfare.
Note: Expected to be given in 2013–14. Offered jointly with the Kennedy School as SUP 921

**Government 2340b. Social Policy II**
Catalog Number: 5491  
Jennifer L. Hochschild and Amitabh Chandra (Kennedy School)  
Half course (spring term). Tu., 2–5. EXAM GROUP: 16, 17  
Considers the effects of policies and institutions in creating or reducing inequality in the US and other advanced democracies, as well as the reciprocal effects of inequality on political activity and policy choices.
Note: Offered jointly with the Kennedy School as SUP-922.

**Government 2356. Agenda Setting and Representation in Congress**
Catalog Number: 50174 Enrollment: Open to qualified undergraduates with instructor’s permission  
Matthew B. Platt  
Half course (fall term). Hours to be arranged.  
This graduate level seminar approaches the Congressional literature with a focus on how to further research in two key areas: agenda setting and representation.
Note: Expected to be given in 2013–14.

**Government 2453. Practical and Theoretical Regulation of Voting**
Catalog Number: 9666  
James M. Snyder  
Half course (spring term). Hours to be arranged.  
The course will focus on points of contact between legal scholarship on voting rights and election law and the political science literature on redistricting, voting behavior, and elections. Emphasis will be placed on how observed data can be, and should be, used as evidence.
Note: Expected to be given in 2013–14.

**Government 2474. Approaches to the Study of the US Congress: Models and Methods**
Catalog Number: 66433  
Kenneth A. Shepsle and James M. Snyder  
Half course (spring term). Hours to be arranged.  
In this seminar we survey and critically evaluate various models of Congressional politics. Special emphasis is given quantitative and modeling approaches to legislative organization,
legislative process, congressional elections, legislative parties, House-Senate comparisons, and inter-branch politics. Students are expected to participate actively each week, complete several small writing assignments, and produce a research paper.  
*Note:* Expected to be given in 2013–14.

**[*Government 2490. The Political Economy of the School]*

Catalog Number: 3399  
Paul E. Peterson  
_Half course (spring term). Hours to be arranged._

Examination of political and economic influences on education policy and governance.  
*Note:* Expected to be given in 2013–14. Limited enrollment. Background in statistics expected. Permission of instructor required for all students who are not graduate degree candidates in the FAS Department of Government. Offered jointly with the Kennedy School as HLE-348. Meets at the Kennedy School.  
_Prerequisite:_ Government 1368, or permission of instructor.

**Government 2500. Bureaucratic Politics - (New Course)**

Catalog Number: 80905  
Daniel P. Carpenter  
_Half course (fall term). W., 10–12. EXAM GROUP: 3, 4_

A theoretically and empirically intensive examination of public bureaucracies in the U.S. and other nations. Empirical issues include administrative behavior, bounded rationality, delegation, hierarchy, organizational capacity, bureaucratic learning, redundancy, bureaucratic delay, and political influence.

**[Government 2525. Political Geography - (New Course)]**

Catalog Number: 14354  
Ryan Enos  
_Half course (spring term). Tu., 2:30–4:30._

This class explores the influence of space on political behavior. The course will explore the theoretical underpinnings of spatial analysis, read current literature that focuses on geography and politics, and provide applied resources of technology and data for using spatial analysis in research. The class will focus mostly on American politics, but will also use examples from comparative studies.

**[Government 2576. Racial and Ethnic Politics in the United States]**

Catalog Number: 7260  
Jennifer L. Hochschild and Claudine Gay  
_Half course (spring term). Hours to be arranged._

The course begins with the history and structure of the classic Black-White binary, then addresses ways in which it must be rethought to include other groups, mainly Asians and Latinos. Issues include racialization, immigrant incorporation, political coalitions and conflict, racial mixture, and links between race, class, gender, and ideology. Focuses on the United States but includes comparisons with Europe, Latin America, and South Africa.  
*Note:* Expected to be given in 2014–15.
Cross-listed Courses

*Sociology 223. American Society and Public Policy: Research Seminar - (New Course)

International Relations

For Undergraduates and Graduates

[Government 1730. War and Politics]
Catalog Number: 6806
Stephen P. Rosen
Half course (fall term). Tu., Th., 2-4.
Explores the organized use of violence for the purposes of the state, with particular attention paid to the question of strategy and the sources of victory.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Government 1732. The Origins of Modern Wars
Catalog Number: 7668
Stephen Martin Walt (Kennedy School)
Half course (spring term). M., W., at 1; sections TBA. EXAM GROUP: 3
This course explores the causes of war. It examines the different theories that have been devised to explain organized violence between states (or groups seeking to control a state), and evaluates these competing theories by exploring several major conflicts of the past 100 years: World War I, World War II, the Cold War, the Arab-Israeli conflict, and the recent wars in the Persian Gulf. The course also considers the phenomenon of ethnic conflict, the implications of nuclear weapons and the question of whether large-scale war is becoming "obsolete."
Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

Government 1740. International Law
Catalog Number: 7406
Beth A. Simmons
Half course (fall term). M., W., (F.), at 10. EXAM GROUP: 3
An introduction to public international law for students of international relations. The primary purpose is to enhance students’ understanding of the ways in which international law orders international politics. Emphasis is on the substantive rules of international law, the relationship between law and politics, and cases that illustrate the issues. Topics include international human rights law, international economic law and institutions, the use of force, war crimes, and terrorism.

*Government 1741. The Euro-Crisis: Causes and Consequences - (New Course)
Catalog Number: 21558
Henrik Enderlein (Kennedy School)
Half course (spring term). Tu., Th., 10:10–11:30. EXAM GROUP: 12, 13
This course takes an advanced political economy perspective to analyze the causes and
consequences of the crisis in the euro area. The main topics covered in this class include (i) the political and economic rationales behind European integration and the creation of the euro, (ii) the main economic and financial market implications arising in a single currency block that is neither an optimum currency area nor a politically integrated fiscal union, (iii) the causes of the crisis in the euro area and the main steps/instruments in its resolution, (iv) the broader implications for EU economic governance and EU politics, with a particular focus on the design of fiscal federations. The course adopts an applied policy-perspective, but some basic to intermediate understanding of macro-economics would be useful. Previous knowledge of European integration and the functioning of EU institutions would be welcome but is not a requirement.

*Note:* Offered with HKS as IGA-663.

**[*Government 1760. International Relations of East Asia]*
Catalog Number: 2733 Enrollment: Limited to 50.
Alastair Iain Johnston

*Half course (fall term). Hours to be arranged.*
Introduction to the historical, military, political, economic, and cultural features of interstate relations in East Asia and the Pacific. The course also presents some theoretical and methodological tools for more systematic analysis of these issues. The goal is to understand changing levels of conflict and cooperation in the region.

*Note:* Expected to be given in 2013–14.

**Government 1780. International Political Economy**
Catalog Number: 0272
Jeffry Frieden

*Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8*
Analyzes the interaction of politics and economics in the international arena. Focuses on international trade, investment, monetary, and financial relations. Includes discussion of developed, developing, and formerly centrally-planned nations.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**[Government 1782. Domestic Politics and International Relations]**
Catalog Number: 56375
Dustin Tingley

*Half course (fall term). Hours to be arranged.*
The course will explore the ways domestic politics influence relations between countries, as well as the ways domestic political relationships are influenced by interstate relations. We will cover both security and economic policy areas and explore how they influence each other. The role of interest groups, domestic institutions, and the general public in determining foreign policy will all be studied with a primary emphasis on the United States.

*Note:* Expected to be given in 2013–14.

**Government 1790. American Foreign Policy**
Catalog Number: 8017 Enrollment: Limited to 75.
Shawn Ling Ramirez
Half course (fall term). Tu., Th., 10–11:30; EXAM GROUP: 12, 13
Examines and explains the international actions of the US Government. Explanations drawn from history, international relations theory, and from the study of American political and bureaucratic institutions. Emphasis is placed on the recent rise of the US to a position of unprecedented military dominance, how this military power has been used, and how other states, non-state actors, or global governance institutions have responded.
Note: This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Catalog Number: 3567 Enrollment: Limited to 30.
Graham T. Allison, Jr. (Kennedy School) and David Sanger (Kennedy School)
Half course (fall term). M., 6–9 p.m. EXAM GROUP: 9
Using a series of case studies that jump off the front page, this course grapples with the hardest U.S. national security challenges of the decade ahead. They range from decisions about when to intervene in civil wars or participate in regime change, to preventing nuclear terrorism, the Arab Spring, preventing Iran from getting the bomb and pressuring North Korea to surrender its weapons. The course delves deeply into the problem of dealing with Afghanistan and Pakistan, and coping with the rise of China-while the endless cycle of leaks and press analysis complicates the process of developing sound policy and strategy. Students will learn to devise strategies and write strategic options memos as part of the policymaking process, all while balancing the need to communicate to major constituencies to sustain public support, while coping with a world where a pervasive press makes secrecy a luxury of the past.
Note: Offered jointly with the Kennedy School as IGA-211. Meets at the Harvard Faculty Club (20 Quincy St., Cambridge).

Catalog Number: 8908 Enrollment: Limited to 50.
Alastair Iain Johnston
Half course (fall term). M., W., at 1. EXAM GROUP: 6
Introduction to the descriptive history of China’s international relations with special focus on different theoretical explanations for changes in foreign policy behavior (e.g. polarity, history, ideology, leadership, bureaucracy, among others).
Note: No prior background in China or international relations theory required.

Cross-listed Courses

[Ethical Reasoning 27 (formerly Moral Reasoning 28). Ethics and International Relations]
*History 82f. The Origins of the Cold War: The Yalta Conference (1945)
*History 1329. Human Rights: History and Theory - (New Course)
[History 1465. The United States in the World since 1900]
History 1989. New World Orders? From the Cold War to Contemporary International Relations - (New Course)

Primarily for Graduates
*Government 2710. International Relations: Field Seminar*
Catalog Number: 8310
_Alastair Iain Johnston_
_Half course (spring term). Tu., 10–12._
A survey of the field.
_Not: Limited to Government graduate students. Suitable for students preparing for general examinations._

*Government 2719. Special Topics in International Relations - (New Course)*
Catalog Number: 18325
_Beth A. Simmons_
_Half course (spring term). M., 4–6. EXAM GROUP: 9_
This is a graduate level reading course on international relations. The purpose is to both continue preparation for general exams, and to encourage students to develop their dissertation prospectus. Special attention is given to reading book length projects in preparation for designing and organizing the PhD dissertation.
_Not: Permission of instructor required._

[Government 2735. Empirical Models in International Relations]
Catalog Number: 9499
_Muhammet Ali Bas and Beth A. Simmons_
_Half course (spring term). Hours to be arranged._
This course examines statistical issues relevant to the study of international politics. The purpose is to familiarize students with different models that have been employed in research on international conflict, IPE and international institutions.
_Not: Expected to be given in 2013–14._

Government 2752. Formal Modeling in International Relations
Catalog Number: 3764
_Muhammet Ali Bas_
_Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17_
This course is intended for advanced graduate students interested in the formal analysis of international relations. The goal is to expose students to the advantages and limitations of mathematical formalization in international relations.

Catalog Number: 7392
_Jeffry Frieden and Beth A. Simmons_
_Half course (fall term). Hours to be arranged._
A graduate-level introduction to the theoretical and empirical literature on the political economy of international trade, monetary, regulatory, and investment policies.
_Not: Expected to be given in 2013–14._

[Government 2782. State Failure and Civil War]
Catalog Number: 0742
_Robert H. Bates_
**2012-2013 Previous Courses of Instruction**

**Half course (spring term). Hours to be arranged.**
The study of modern works on civil wars, terrorism, and state failure.
*Note:* Expected to be given in 2013–14.

**[Government 2791. Comparative Foreign and Security Policy]**
Catalog Number: 7696
*Alastair Iain Johnston*

**Half course (fall term). Hours to be arranged.**
Focus is on the theory, methods, and data used in the empirical analysis of the foreign security policies of states. Examines the sources of state preferences, the structural and domestic constraints on state action, and foreign policy change.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Prior training in international relations theory strongly recommended.

**Government 2887. Imperial Legacies and International Politics in the Post-Soviet Space**
Catalog Number: 15419
*Timothy J. Colton and Serhii Plokhi*
**Half course (spring term). Th., 2–4.**
Examines trends in international relations and transnational processes among the fifteen post-Soviet states, with special attention to the role of Russia, intra-regional cooperation and conflict, the involvement of outside players, and domestic determinants.

**Graduate Courses of Reading and Research**

*Government 3000. Reading and Research*
Catalog Number: 3391
*James E. Alt 1593, Robert H. Bates 1251 (on leave 2012-13), Eric Beerbohm 5558, Daniel P. Carpenter 4509, Timothy J. Colton 2269, Jorge I. Domínguez 3823, Grzegorz Ekiert 2718, Ryan Enos 6825 (spring term only), Jeffry Frieden 1627, Claudine Gay 5485, Adam Glynn 5600 (on leave spring term), Peter A. Hall 7272, Michael J. Hiscox 4104, Jennifer L. Hochschild 3785, Stanley Hoffmann 1757, Nahomi Ichino 5316, Torben Iversen 1250 (on leave 2012-13), Alastair Iain Johnston 3213, Gary King 1723, Steven R. Levitsky 2395, Roderick Macfarquhar 7856 (on leave fall term), Harvey C. Mansfield 1731 (on leave 2012-13), Eric M. Nelson 5345, Elizabeth J. Perry 3074, Paul E. Peterson 2114 (on leave spring term), Susan J. Pharr 1518, Robert D. Putnam 6193, Patrick T. Riley 5944, James Robinson 5022, Michael E. Rosen 5610, Stephen P. Rosen 2721 (on leave fall term), Nancy Lipton Rosenblum 3786 (on leave 2012-13), Pedram Safari 5849, Michael J. Sandel 7065, Kenneth A. Shepsle 1421, Beth A. Simmons 4487, Theda Skocpol 1387, Sumeeta Srinivasan 5215, Dennis F. Thompson 1426 (on leave fall term), Richard Tuck 1704, and Daniel F. Ziblatt 4641 (on leave 2012-13)*
*Note:* Requires written work of sufficient quantity and quality so that the course is equivalent to a lecture course or a seminar. Students who want supervised reading without substantial written work should take TIME-C (catalog number 8899) instead.

*Government 3000a. Reading and Research Seminar*
Catalog Number: 4143
*Members of the Department*
Small seminar on special topics. May be arranged with faculty listed under Government 3000. Requires written work as does Government 3000, but also involves regular class meetings.

*Government 3001. Approaches to the Study of Politics
Catalog Number: 21415 Enrollment: Limited to and required of first year department graduate students.
Jeffry Frieden
Half course (fall term). M., 4–6. EXAM GROUP: 9
Graduate Seminar designed to introduce research questions and frontiers across political science.

*Government 3100. Safra Graduate Fellowship Seminar
Catalog Number: 40555 Enrollment: Limited to graduate fellows of the Safra Center only.
Eric Beerbohm 5558
Full course (indivisible). Hours to be arranged.
This seminar examines how moral and political theories should be brought to bear on institutional and policymaking choices. Special attention will be given to the relation between ideal and nonideal theory.
Note: Not repeatable for credit.

Research Workshops

All Department of Government graduate students who have passed generals are eligible to enroll in one of the following research workshops. Others may attend with permission of instructor.

*Government 3004. Research Workshop in American Politics
Catalog Number: 8566
Daniel P. Carpenter 4509 and Claudine Gay 5485
Full course (indivisible). Tu., 12–2.
A forum for the presentation and discussion of research in progress by graduate students (second year and above), faculty, and visiting scholars. Anyone working on contemporary American politics or on US political development welcome. Occasional presentations by invited speakers.

*Government 3005 (formerly *Government 3005b). Research Workshop in International Relations
Catalog Number: 1016
Muhammet Ali Bas 5883, Stephen P. Rosen 2721 (on leave fall term) (spring term only), and Dustin Tingley 6836
Full course (indivisible). Th., 12–2.
Research workshop for advanced graduate students working on dissertation proposals in international relations.

*Government 3006. Research Workshop in Comparative Politics
Catalog Number: 0910
Grzegorz Ekiert 2718, Nahomi Ichino 5316, and Susan J. Pharr 1518
Full course (indivisible). W., 4–6. EXAM GROUP: 9
The workshop offers advanced graduate students an opportunity to present their work-in-
progress, benefit from critiques of it, and discuss theoretical and methodological issues. 

*Note:* Doctoral students from other departments and faculties admitted if space permits.

Catalog Number: 0968
James E. Alt 1593 and Michael J. Hiscox 4104
*Full course (indivisible). M., 12–2. EXAM GROUP: 5, 6*
Intended for graduate students in the third year and above, this course welcomes scholarship of all types and on all aspects of political economy. Intended to provide a venue in which to develop and to debate work in progress.

**Government 3008. Research Workshop in Political Theory**
Catalog Number: 1704
Eric M. Nelson 5345 and Michael E. Rosen 5610
*Full course (indivisible). W., 12–2.*

**Government 3009. Research Workshop in Applied Statistics**
Catalog Number: 8142
Alberto Abadie (Kennedy School) 5277, Lee Fleming (Business School) 3839, Adam Glynn 5600 (on leave spring term), Guido W. Imbens 2671, Alexandra Achen Killewald 7028, Gary King 1723, Luke Weisman Miratrix 6490, James M. Robins (Public Health) 1492, Donald B. Rubin 7966, Arthur P. Spirling 6062, Tyler J. VanderWeele (Public Health) 6574, and Christopher Winship 3189 (on leave spring term), Teppei Yamamoto (Political Science, MIT)
*Full course (indivisible). W., 12–2.*
A forum for graduate students, faculty, and visiting scholars to present and discuss work in progress. Features a tour of Harvard’s statistical innovations and applications with weekly stops in different disciplines. Occasional presentations by invited speakers.

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**Health Policy**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

**Faculty of the Committee on the Doctor of Philosophy in Health Policy**

Joseph P. Newhouse, John D. MacArthur Professor of Health Policy and Management (Kennedy School, Medical School, Public Health) (Chair)
Nava Ashraf, Associate Professor (Business School)
John Zaven Ayanian, Professor of Health Care Policy (Medical School)
Katherine Baicker, Professor of Health Economics (Public Health)
Robert J. Blendon, Richard L. Menschel Professor of Public Health, Professor of Health Policy and Political Analysis (Public Health)
Barry R. Bloom, Harvard University Distinguished Service Professor and Joan L. and Julius H. Jacobson Professor of Public Health (Public Health)
David E. Bloom, Clarence James Gamble Professor of Economics and Demography (Public Health)
Daniel P. Carpenter, Allie S. Freed Professor of Government
Amitabh Chandra, Professor of Public Policy (Kennedy School)
Michael Chernew, Professor of Health Care Policy (Medical School)
Nicholas A. Christakis, Professor of Sociology in the Faculty of Arts and Sciences and Professor of Medical Sociology in the Faculty of Medicine
I. Glenn Cohen, Assistant Professor of Law (Law School)
Jessica L. Cohen, Assistant Professor of Global Health (Public Health)
David M. Cutler, Otto Eckstein Professor of Applied Economics (on leave 2012-13)
Norman Daniels, Mary B. Saltonstall Professor of Population Ethics and Professor of Ethics and Population Health (Public Health)
Amy C. Edmondson, Novartis Professor of Leadership and Management (Business School)
Arnold M. Epstein, John H. Foster Professor of Health Policy and Management (Public Health)
Richard G. Frank, Margaret T. Morris Professor of Health Care Policy (Medical School)
Julio Jose Frenk, T & G Angelopoulos Professor of Public Health and International Development, Dean of the School of Public Health (Kennedy School, Public Health)
Guy S. Gazelle, Professor in the Department of Health Policy and Management (Public Health)
Susanne J. Goldie, Roger Irving Lee Professor of Public Health (Public Health)
David C. Grabowski, Professor of Health Care Policy (Medical School)
James K. Hammitt, Professor of Economics and Decision Sciences (Public Health)
Robert S. Huckman, Professor of Business Administration (Business School)
Haiden A. Huskamp, Professor of Health Care Policy (Medical School)
Ashish Kumar Jha, C. Boyden Gray Associate Professor of Health Policy and Management (Public Health)
Nancy M. Kane, Professor of Management (Public Health)
Jane Jooyun Kim, Assistant Professor of Health Decision Science (Public Health)
Gary King, Albert J. Weatherhead III University Professor
Michael R. Kremer, Gates Professor of Developing Societies
Bruce E. Landon, Professor of Health Care Policy (Medical School)
Peter V. Marsden, Edith and Benjamin Geisinger Professor of Sociology, Harvard College Professor, Dean of Social Science
Marie C. McCormick, Sumner and Esther Feldberg Professor of Maternal and Child Health (Public Health)
Thomas G. McGuire, Professor of Health Economics in the Department of Health Care Policy (Medical School)
Barbara J. McNeil, Ridley Watts Professor of Health Care Policy (Medical School)
John Michael McWilliams, Assistant Professor of Health Care Policy (Medical School)
Michelle M. Mello, Professor of Law and Public Health (Public Health)
Carl N. Morris, Professor of Statistics (on leave spring term)
Sharon-Lise T. Normand, Professor of Health Care Policy (Biostatistics) (Medical School)
Alistair James O’Malley, Associate Professor of Health Care Policy (Medical School)
Gary Pisano, Harry E Figgie Jr Professor of Business Administration (Business School)
Meredith B. Rosenthal, Professor of Health Economics and Policy (Public Health)
Donald B. Rubin, John L. Loeb Professor of Statistics
Joshua A. Salomon, Professor of Global Health (Public Health)
Sara Jean Singer, Assistant Professor of Health Care Management and Policy (Public Health)
Stephen B. Soumerai, Professor of Population Medicine (Medical School)
David G. Stevenson, Associate Professor of Health Policy in the Department of Health Care Policy (Medical School)
B. Katherine Swartz, Professor of Health Policy and Economics (Public Health)
Milton C. Weinstein, Henry J Kaiser Professor of Health Policy and Management and Biostatistics (Medical School, Public Health)
Alan M. Zaslavsky, Professor of Health Care Policy (Statistics) (Medical School)
Richard J. Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy in the John F Kennedy School of Government (Kennedy School)

Other Faculty Offering Instruction in Health Policy

Alyce S. Adams, Lecturer on Ambulatory Care and Prevention (Medical School)
David Bloom (Public Health)
Allan M. Brandt, Amalie Moses Kass Professor of the History of Medicine in the Faculty of Medicine, and Professor of the History of Science in the Faculty of Arts and Sciences (on leave 2012-13)
Majid Ezzati, Associate Professor of International Health (Public Health)
Erica M. Field
Lisa A. Prosser, Adjunct Associate Professor in the Department of Health Policy and Management (Public Health)

Graduate Program in Health Policy

The PhD in Health Policy, awarded by the Faculty of Arts and Sciences, draws upon the resources of six Harvard faculties: the Faculty of Arts and Sciences, Harvard School of Public Health, Harvard Medical School, Harvard Kennedy School, Harvard Law School, and Harvard Business School. This degree is intended primarily for students seeking teaching careers in institutes of higher learning and/or research careers in policy.

Students in the PhD Program in Health Policy choose a concentration and meet specific curriculum requirements in one of seven disciplines: decision sciences, economics, ethics, evaluative science and statistics, management, medical sociology, or political analysis. In addition to choosing a concentration, students specialize in one of five areas of policy interest: environmental health, health care services, international health, mental health, or public health.

Decision Sciences (Professor Milton C. Weinstein, Chair). Decision sciences are the collection of quantitative techniques that are used for decision making at the individual and collective level. They include decision analysis, risk analysis, cost-benefit and cost-effectiveness analysis, decision modeling, and behavioral decision theory, as well as parts of operations research, microeconomics, statistical inference, management control, cognitive and social psychology, and
The concentration in decision sciences prepares students for research careers that involve the application of these methods to health problems.

Economics (Professor Joseph P. Newhouse, Chair). The concentration in economics focuses on the economic behavior of individuals, providers, insurers, and international, federal, state, and local governments and actors as their actions affect health and medical care. In addition to examining the literature on health economics, the training emphasizes microeconomic theory, econometrics, and interactions with other disciplines, including clinical medicine. The concentration prepares students for research and teaching careers as health economists.

Ethics (Professor Norman Daniels, Chair). The ethics concentration integrates quantitative, qualitative, and normative approaches to the analysis of ethical issues in health policy and clinical practice. Increasingly, the investigation of ethical issues in medicine and health policy has not only drawn on normative ethics and political philosophy, but has included empirical research concerning attitudes and practices in clinical and broader institutional settings. A grasp of normative theories and tools is important because ethical principles and approaches underlie, explicitly or implicitly, the formulation of particular health policies at both the macro and micro level. Students in this track will focus on developing skills in a range of disciplines, with the goal of evaluating how ethical and socio-cultural values shape - and should shape - health policies as well as clinical and public health practices.

Evaluative Science and Statistics (Professor B. Stephen Soumerai and Professor Alan M. Zaslavsky, Co-Chairs). Training in this concentration will enable students to study the effects of a wide range of policies and health services (e.g., health insurance, health-care quality improvement, clinical decision-making, drug policy, cost-containment, and socioeconomic factors) on behaviors, access, processes and quality of health care, health outcomes, or costs. Students in this concentration will develop proficiency in experimental and quasi-experimental research design, statistics, relevant social sciences, and other methodological approaches (e.g., epidemiology, program evaluation, qualitative methods, and survey design).

Management (Professor Amy C. Edmondson and Professor Robert S. Huckman, Co-Chairs). The management concentration prepares students to do research on the organizational, managerial, and strategic issues facing health care providers, payers, and other players in the health care market. Students in this track will learn how theories and concepts from fields such as technology and operations management, organizational behavior, organizational economics, and competitive strategy can be applied to - and further developed for understanding - health care organizations.

Medical Sociology (Professor Nicholas A. Christakis, Chair). In this concentration, students will learn about, and contribute to knowledge in, several research areas that are extremely important to health policy, including the study of professions and professional behavior, the structure of health care organizations and systems, the impact of organizational and professional change on the structure of medical work, organizational improvement programs and their evaluation, the diffusion of innovations across providers and organizations, and the behavior of patients and consumers - including consumer evaluations of health care quality and patient perspectives on the process and outcomes of care.
Political Analysis (Professor Robert J. Blendon, Chair). This concentration is intended for students who wish to do research on the relationship between politics and health policy. Students will study theories of individual opinion formation, voting behavior, legislative organization, and interest group formation. In addition, students will examine the role of public opinion, interest groups, the media, and institutions in influencing health policy outcomes. The research methodologies most utilized in this track include survey research methods and quantitative statistical methods appropriate for large-scale databases.

Applications: Prospective students should visit the Graduate School of Arts and Sciences website at www.gsas.harvard.edu to apply online. Important additional information on financial aid and other aspects of the PhD Program in Health Policy is available from Deborah Whitney, Director, PhD Program in Health Policy (deborah.whitney@harvard.edu) and Ayres Heller, Assistant Director, PhD Program in Health Policy (ayres.heller@harvard.edu). Website: www.healthpolicy.fas.harvard.edu.

Health Policy Courses

**Health Policy 2000. Core Course in Health Policy**
Catalog Number: 4522
*Joseph P. Newhouse (Kennedy School, Medical School, Public Health), Richard G. Frank (Medical School), and Alan M. Zaslavsky (Medical School)*
Full course (indivisible). Tu., Th., 4–6. EXAM GROUP: 18
Topics include the financing and organization of health care, public health, political analysis, medical manpower, health law and ethics, technology assessment, prevention, mental health, long-term care, and quality of care.
*Note:* Required for doctoral candidates in Health Policy and open to others by permission of instructor. Offered jointly with the Kennedy School as HCP-597 and HCP-598 and with the School of Public Health as HPM 246.

*Health Policy 3000. Doctoral Dissertation Research*
Catalog Number: 8422
*Members of the Committee*
Dissertation research.

*Health Policy 3002. Graduate Reading Course: Mental Health Policy*
Catalog Number: 3528
*Richard G. Frank (Medical School) 1371*
Half course (spring term). Hours to be arranged.
Participants discuss research on the politics surrounding mental health policy and examine how to apply existing work and methodological approaches to their own work.
*Note:* Offered in alternate years.

*Health Policy 3010. First-Year Graduate Reading Course: Ethics*
Catalog Number: 9241
*Norman Daniels (Public Health) 4722*
Examines issues in ethics and health policy, including a basic account of justice and health; ethical critique of maximization methodologies, including cost-effectiveness analysis; individual and social responsibility for health; and other topics.

*Health Policy 3015. Second-Year Graduate Reading Course: Ethics
Catalog Number: 4380
Norman Daniels (Public Health) 4722
Student-led course reviews basic issues in ethics, political philosophy, and their bearing on health policy and is important preparation for the qualifying examinations.

*Health Policy 3020. Graduate Reading Course: Political Analysis
Catalog Number: 3781
Robert J. Blendon (Public Health) 2712
Participants present their own ongoing research on the politics surrounding health policy and discuss recent research drawn from various methodological approaches. Graduate students, faculty, and visiting scholars are welcome to present research at all stages.
Note: Offered in alternate years.

*Health Policy 3030. Graduate Reading Course: Medical Sociology
Catalog Number: 1826
Thomas G. McGuire (Medical School) 4723

*Health Policy 3040hf. Research Seminar in Health Policy
Catalog Number: 8870
B. Katherine Swartz (Public Health) 2461
Half course (throughout the year). Hours to be arranged.

*Health Policy 3060hf. Research Seminar in Decision Sciences
Catalog Number: 2133
Joshua A. Salomon (Public Health) 5759
Half course (throughout the year). Hours to be arranged.
Explores key conceptual and methodological issues relevant to research in health decision sciences. Faculty members and invited speakers will assign readings and present examples of theoretical and applied work. Students are required to participate in class discussion and to present their own research work in progress.

*Health Policy 3070. Graduate Reading Course: Economics
Catalog Number: 7439
Joseph P. Newhouse (Kennedy School, Medical School, Public Health) 2425

*Health Policy 3080hf. Graduate Reading Course: Evaluative Science and Statistics
Catalog Number: 9516
John Michael McWilliams (Medical School) 1447, Stephen B. Soumerai (Medical School) 1906, and Alan M. Zaslavsky (Medical School) 1927
Half course (throughout the year).
*Health Policy 3090. Graduate Reading Course: Management*
Catalog Number: 2492
Amy C. Edmondson (Business School) 4613 and Robert S. Huckman (Business School) 5234

**Courses of Interest**

Economics 2460. Health Economics Workshop
[Economics 2465. Health Economics]
*Economics 3460c (formerly *Economics 3460chf). Research in Health Economics*

**History**

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of History

David R. Armitage, Lloyd C. Blankfein Professor of History *(Chair)*
Emmanuel K. Akyeampong, Professor of History and of African and African American Studies
Dimitri Georgiev Angelov, Visiting Associate Professor of History
Sven Beckert, Laird Bell Professor of History *(on leave 2012-13)*
Arbella Herutha Bet-shlimon, Lecturer on History
Ann M. Blair, Henry Charles Lea Professor of History, Harvard College Professor *(Director of Undergraduate Studies)*
Sugata Bose, Gardiner Professor of Oceanic History and Affairs
Vincent Brown, Charles Warren Professor of American History and Professor of African and African American Studies
Joyce E. Chaplin, James Duncan Phillips Professor of Early American History
Lizabeth Cohen, Howard Mumford Jones Professor of American Studies and Dean of the Radcliffe Institute for Advanced Study *(on leave 2012-13)*
Nancy F. Cott, Jonathan Trumbull Professor of American History *(on leave 2012-13)*
Robert Darnton, Carl H. Pforzheimer University Professor
Emma Dench, Professor of the Classics and of History, Harvard College Professor
Caroline M. Elkins, Professor of History *(on leave 2012-13)*
Drew Gilpin Faust, Lincoln Professor of History, President of Harvard University
Niall Ferguson, Laurence A. Tisch Professor of History *(on leave spring term)*
Brett Flehinger, Lecturer on History
Ivan Gaskell, Senior Lecturer on History
Andrew Gordon, Lee and Juliet Folger Fund Professor of History
Peter E. Gordon, Amabel B. James Professor of History, Harvard College Professor *(on leave*
2012-13) Annette Gordon-Reed, Professor of Law in the Faculty of Law; and Professor of History in the Faculty of Arts and Sciences
James Hankins, Professor of History
Evelyn Brooks Higginbotham, Victor S. Thomas Professor of History and of African and African American Studies
Patrice Higonnet, Robert Walton Goelet Professor of French History (on leave spring term)
Maya Jasanoff, Professor of History
Andrew Jewett, Associate Professor of History and of Social Studies
Alison Frank Johnson, Professor of History
Walter Johnson, Winthrop Professor of History and Professor of African and African American Studies
Cemal Kafadar, Vehbi Koc Professor of Turkish Studies (on leave 2012-13)
William C. Kirby, T. M. Chang Professor of China Studies and Spangler Family Professor of Business Administration
Mark A. Kishlansky, Frank B. Baird, Jr. Professor of History
James T. Kloppenberg, Charles Warren Professor of American History (on leave 2012-13)
Jill M. Lepore, David Woods Kemper ’41 Professor of American History, Harvard College Professor
Mary D. Lewis, Professor of History
Charles S. Maier, Leverett Saltonstall Professor of History
Erez Manela, Professor of History (Director of Graduate Studies)
Terry D. Martin, George F. Baker III Professor of Russian Studies
Michael McCormick, Francis Goelet Professor of Medieval History
Lisa M. McGirr, Professor of History (on leave 2012-13)
Francine McKenzie, William Lyon MacKenzie King Professor of Canadian Studies
Ian J. Miller, Associate Professor of History (on leave 2012-13)
Noah Chaim Millstone, Lecturer on History
Roy Mottahedeh, Gurney Professor of History (on leave spring term)
Micah S. Muscolino, Visiting Associate Professor of History
Afsaneh Najmabadi, Francis Lee Higginson Professor of History and Professor of the Studies of Women, Gender, and Sexuality
Kelly A. O’Neill-Uzgiris, Associate Professor of History
E. Roger Owen, A. J. Meyer Professor of Middle East History, A. J. Meyer Professor of Middle East History, Emeritus (on leave fall term)
Steven Ozment, McLean Professor of Ancient and Modern History (on leave spring term)
Serhii Plokhii, Mykhailo S. Hrushevsky Professor of Ukrainian History
Emma Rothschild, Jeremy and Jane Knowles Professor of History
Mary Elise Sarotte, Visiting Professor of Government and of History
Daniel L. Smail, Professor of History
Theodore E. Stebbins, Lecturer on History
Hue-Tam Ho Tai, Kenneth T. Young Professor of Sino-Vietnamese History
Julia Timpe, Lecturer on History
Heidi Jacqueline Tworek, Lecturer on History
Laurel Thatcher Ulrich, 300th Anniversary University Professor
Kirsten A. Weld, Assistant Professor of History
Jeremy Avrum Yellen, Lecturer on History
Samuel Zipp, Visiting Assistant Professor of History (Brown University)

Other Faculty Offering Instruction in the Department of History

Asad A. Ahmed, Associate Professor of Anthropology (on leave 2012-13)
William P. Alford, Henry L Stimson Professor of Law (Law School)
Bernard Bailyn, Adams University Professor, Emeritus and James Duncan Phillips Professor of Early American History, Emeritus
Robin M. Bernstein, Associate Professor of African and African American Studies and of Studies of Women, Gender, and Sexuality
Thomas N. Bisson, Henry Charles Lea Professor of Medieval History, Emeritus
David Blackbourn, Coolidge Professor of History, Emeritus
Peter K. Bol, Charles H. Carswell Professor of East Asian Languages and Civilizations
Janet Browne, Aramont Professor of the History of Science, Harvard College Professor (on leave 2012-13)
Steven C. Caton, Khalid Bin Abdullah Bin Abdulrahman Al Saud Professor of Contemporary Arab Studies
John H. Coatsworth, Monroe Gutman Professor of Latin American Affairs, Emeritus
Kathleen M. Coleman, James Loeb Professor of the Classics
Albert M. Craig, Harvard-Yenching Professor of History, Emeritus
Charles Donahue, Jr., Paul A. Freund Professor of Law (Law School)
Carter J. Eckert, Yoon Se Young Professor of Korean History (on leave spring term)
Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History (on leave fall term)
Noah R. Feldman, Bemis Professor of International Law (Law School)
Francis Fiorenza, Charles Chauncey Stillman Professor of Roman Catholic Theological Studies (Divinity School)
Rachel L. Greenblatt, Associate Professor of Near Eastern Languages and Civilizations
Peter A. Hall, Krupp Foundation Professor of European Studies
David Neil Hempton, Dean of the Faculty of Divinity, John Lord O’Brien Professor of Divinity and Alonzo L. McDonald Family Professor of Evangelical Theological Studies (Divinity School)
Morton J. Horwitz, Charles Warren Professor of American Legal History (Law School)
Akira Iriye, Charles Warren Professor of American History, Emeritus
Christopher P. Jones, George Martin Lane Professor of the Classics and of History, Emeritus
Edward L. Keenan, Andrew W. Mellon Professor of History, Emeritus
Alexander Keyssar, Matthew W. Stirling, Jr. Professor of History and Social Policy at the Kennedy School of Gov’t (Kennedy School)
Sun Joo Kim, Harvard-Yenching Professor of Korean History
Elisabeth Koll, Associate Professor of Business Administration (Business School)
Philip A. Kuhn, Francis Lee Higginson Professor of History and of East Asian Languages and Civilizations, Emeritus
Bruce H. Mann, Carl F. Schipper, Jr. Professor of Law (Law School)
Louis Menand, Anne T. and Robert M. Bass Professor of English (on leave fall term)
Samuel Aaron Moyn, Visiting Professor of Law (Law School)
Richard Pipes, Frank B Baird, Jr Professor of History, Emeritus
Directed Study for Undergraduates

The Department makes available, so far as its resources permit, opportunity for individual instruction in fields of special interest in which a regular course is not offered.

*History 91r. Supervised Reading and Research
Catalog Number: 1458
Ann M. Blair and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Limited to juniors and seniors. Students wishing to enroll must petition the DUS for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course work as background for their project.

Tutorials in History

*History 97. Sophomore Tutorial
Catalog Number: 4469
Jill M. Lepore, Emmanuel K. Akyeampong, and Dimiter Georgiev Angelov
Half course (spring term). Hours to be arranged.
Introduction to the ways in which historians recreate the past. Students will read prototypes of historical genres and write their own histories in alternating sessions. Discussion sections and small tutorials.
Note: Required of, and limited to, all History concentrators in the spring term of their sophomore year, as well as students pursuing a secondary field in History.

*History 99. Senior Thesis Tutorial
Catalog Number: 5803
Heidi Jacqueline Tworek
Full course. W., 6–9 p.m. EXAM GROUP: Fall: 9
Research and writing the senior thesis in History.
Note: Required of, and ordinarily limited to, seniors completing the History concentration’s thesis program. Permission must be obtained from the Tutorial Office.

Reading Seminars

Required for History concentrators; open to non-concentrators as well. Graduate students may enroll with the instructor’s permission.
Primarily for Undergraduates

*History 70c. Topics in Natural History*
Catalog Number: 9332 Enrollment: Limited to 12.
Daniel L. Smail 5343
*Half course (fall term).* W., 2–4. EXAM GROUP: 7, 8
A reading seminar focused on literature relevant for a natural history of humankind from several million years ago to the present. Topics will include population diasporas; long-distance exchange; coevolution; family, sex, and marriage; food; communication; goods and things; technology; human contact with ecosystems; status; demography and scale; and cognitive studies. The course will introduce students to the rapidly growing field of big history or deep history.

[*History 70h. History and Memory]*
Catalog Number: 98454 Enrollment: Limited to 12.
Rachel L. Greenblatt 5537
*Half course (spring term). Hours to be arranged.*
Explores the interactions of "memory" and historical writing, reading both theoretical writings on collective memory (e.g. Halbwachs, Nora, Yerushalmi and some of their critics) and more practical examples of the historical study of communal memory drawn from different periods and geographical regions. Please note that in contrast to many reading seminars, this course introduces you not to a particular swath of history, but rather to a set of questions raised in various contexts.
*Note:* Expected to be given in 2013–14.

Catalog Number: 93766 Enrollment: Limited to 12.
Dimiter Georgiev Angelov 7002
*Half course (spring term). Hours to be arranged.*
The seminar focuses on the eastern Mediterranean in a period of economic integration and political fragmentation marked by the crusades, the expansion of the Italian maritime republics, western colonization, and the conquests of the Turks. How did the Byzantines react to the new unsettled world around them? What was the role of the newcomers? Special attention will be paid to the crusades, cross-cultural contacts, and the Mediterranean economy.
*Note:* Expected to be given in 2013–14.

*History 70k. Jewish History and the Question of Diaspora (with Rena Lauer) - (New Course)*
Catalog Number: 19891 Enrollment: Limited to 12.
Erez Manela 4762
*Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16*
An introduction to the social history of Jews and Jewish communities in premodern Christian Europe through the lens of the people who study them in our modern world: scholars of Jewish History. Topics include: identity and diaspora; how segregated were Jews?; stereotypes of Jews and money; women and gender; expulsion and memory; and the relationship between
contemporary concerns and medieval historiography.

Note: Instructor: Rena Lauer

[*History 71b. The European Renaissance and Reformation, 1350-1650]*
Catalog Number: 6819 Enrollment: Limited to 12.
Steven Ozment 6197 (on leave spring term)

*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*

A structured introduction to European Renaissance and Reformation Europe. Both classic and recent studies will be read and discussed. Attention is given to a variety of European lands and cultures. Recommended to undergraduates from all fields of study.

Note: Expected to be given in 2013–14. This course is open to first and second year graduate students.

[*History 72b. On Display: Commemoration, Collection and Public Spaces (c. 1600-2000)*]
Catalog Number: 9970 Enrollment: Limited to 12.
Rachel L. Greenblatt

*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*

Traces the collection, commissioning, creation and display of artworks and objects from their development in religious and royal settings of the early modern period to their uses in nation-building and self-representation in the twentieth-century. Topics include monuments and urban spaces in Christian-Jewish polemics, collections as displays of political power, and museums as sites of national, cultural and ethnic identity. Geographical focus on Central Europe, but Western Europe and North America will also be considered.

[*History 72d (formerly History 1252). Paris from the French Revolution through the 19th Century*]
Catalog Number: 6355 Enrollment: Limited to 12.
Patrice Higonnet 2730 (on leave spring term)

*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*

Examines the art, literature, and history of the “capital of the 19th century.” Subjects will include Balzac, Flaubert, and Baudelaire; Delacroix, Manet, and Degas; the Revolutions of 1789, 1848, and 1871.

Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

[*History 72e. The Life and Reign of Catherine the Great*]
Catalog Number: 9664 Enrollment: Limited to 12.
Kelly A. O’Neill-Uzgiris 5881

*Half course (fall term). Hours to be arranged.*

Examines the private and public worlds of one of Russia’s most famous rulers. Introduces students to the political, social, and cultural transformation of the eighteenth-century empire, as well as to longstanding debates about Catherine’s reign and the conflicting images of the empress herself. Topics include gender and authority, the Russian Enlightenment, architecture and urban planning, cultural life, religious and ethnic diversity.

Note: Expected to be given in 2013–14.
[*History 72k. The Worlds of Joseph Conrad]*

Catalog Number: 74011 Enrollment: Limited to 12.

*Maya Jasanoff 5877*

*Half course (fall term). Hours to be arranged.*

Anarchists, asylum-seekers, gun-runners, sea captains and corporate agents gone rogue: all these figures and more populated the world of Joseph Conrad, the greatest novelist to explore the working of modern imperialism. This course uses three major works - The Secret Agent, Lord Jim, and Heart of Darkness - as windows onto empire and globalization c. 1900. Topics under consideration include informal imperialism, "going native," migration, seafaring, and technological change. Readings and assignments facilitate an interdisciplinary approach to history.

*Note:* Expected to be given in 2014–15.

*History 72l. Religion and Modernity in Transatlantic Perspective (with Sarah Shortall) - (New Course)*

Catalog Number: 32625 Enrollment: Limited to 12.

*Erez Manela 4762*

*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*

This reading seminar introduces students to the recent theoretical and historical literature which seeks to revise the standard secularization thesis and account for the persistence of religion at the heart of the modern world. Students will read works on North America and Europe that address such themes as capitalism, science, totalitarianism, the Occult, globalization, and gender, considering the ways in which religion and modernity mutually produce and reshape one another.

*Note:* Instructor: Sarah Shortall

*History 72m. Living under a Dictatorship: Histories of Everyday Life in the Totalitarian Regimes of Twentieth Century Europe - (New Course)*

Catalog Number: 34539 Enrollment: Limited to 12.

*Julia Timpe 6496*

*Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18*

This reading seminar explores the everyday life of people in Europe’s totalitarian dictatorships of the twentieth century, including Fascist Italy, Nazi Germany, the Soviet Union and the German Democratic Republic. The course will introduce students to scholarly approaches to and debates about the history of the everyday, both theoretically and through a wide array of historical studies that deal with themes such as the family, youth, sports, resistance and consent.

[*History 73a. Republics and Republicanism]*

Catalog Number: 2494 Enrollment: Limited to 12.

*James Hankins 1239 and Harvey C. Mansfield 1731 (on leave 2012-13)*

*Half course (spring term). Hours to be arranged.*

Surveys the history of republican political theory from antiquity to the modern era. Themes to be discussed include: the relationship between republicanism and liberalism; the roots of republicanism in Greek and Roman political thought; Italian civic humanism; and the ideological origins of the English and American Revolutions. Readings will be drawn from Aristotle, Cicero,
Machiavelli, More, Montesquieu, the Federalist Papers, Tocqueville, and others. 

*Note:* Expected to be given in 2013–14.

**History 73b. Introduction to Intellectual History**
Catalog Number: 1881 Enrollment: Limited to 12.
Andrew Jewett 5878

*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*

Introduction to major themes, periods and authors in intellectual history, in the West and beyond, and to a variety of approaches to the field. Students will be guided through the stages of writing an essay on a topic of their choice. Designed for current and future history concentrators and open to those with similar interests, with instructor’s consent.

**History 74c. Bodily Functions: Histories of Bare Life and Bio-Power**
Catalog Number: 1090 Enrollment: Limited to 12.
Walter Johnson 5616

*Half course (spring term). Hours to be arranged.*

This course will expose students to challenging and influential scholarship on the history of human being. The reading combines an emphasis on social theory - Marxism, Cultural Anthropology, Post-modernism, Feminism, etc. - and on historical topics of central importance - the history of the senses, labor, torture, starvation, racism, colonialism, sexuality, etc. The class will meet once a week for two hours.

*Note:* Expected to be given in 2013–14. Students will be required to write weekly papers of one to three pages summarizing their response to the assigned reading, and to write a final paper of approximately fifteen pages on a historiographical issue of their own choosing.

**History 74l. The New Deal and American Liberalism**
Catalog Number: 86716 Enrollment: Limited to 12.
Brett Flehinger 1830

*Half course (spring term). Hours to be arranged.*

This course studies the responses to the Great Depression that formed the New Deal. Particular attention will be paid to the connection of between policy development and the rise of American Liberalism. Major topics include Social Security, economic redistribution, Keynesianism, social planning, regulatory reform, conservative critiques of the New Deal and others.

*Note:* Expected to be given in 2013–14.

**History 74n. U.S. History: Major Themes in the Twentieth Century**
Catalog Number: 26718 Enrollment: Limited to 12.
Lisa M. McGirr 2543 (on leave 2012-13)

*Half course (spring term). Hours to be arranged.*

The twentieth-century United States is a vibrant and flourishing field of historical study. The goal of this seminar is to introduce students to the central questions, problems and debates in the history of the "American century." Students will learn how the literature of history has developed through reading both older and newer approaches. Readings focus on questions of politics, political culture, the state and social life. The course is both thematic and chronological (as well as necessarily selective). Students are expected to prepare well for seminar and to participate actively in discussion. Each class will begin with a brief introduction to the readings (no more
than five minutes) by a member of the seminar. The idea here is for one student to take special responsibility for leading discussion, raising questions and problems posed by the reading. 

Note: Expected to be given in 2013–14.

[*History 74t. New York from 1900 to 9/11: Local Lives, Global City]*  
Catalog Number: 97106 Enrollment: Limited to 12.  
*Elizabeth Cohen 3627 (on leave 2012-13)*  
**Half course (spring term). Hours to be arranged.**  
By the end of the 20th century, New York was often described as a "global city" - a nodal point in worldwide economic, cultural, and human networks. But how new was that? How did New Yorkers define themselves and their city over the previous century? This reading seminar will examine New York at key moments - as turn-of-the-century melting pot, as a frontline during world wars, as an inspiration for the arts, as a constantly evolving built environment. 

Note: Expected to be given in 2013–14.

[*History 74v. Public Opinion and American Democracy] - (New Course)*  
Catalog Number: 10907 Enrollment: Limited to 12.  
*Andrew Jewett 5878*  
**Half course (fall term). Hours to be arranged.**  
Explores how Americans have understood the role of public opinion in their democracy since the founding period. Topics include the emergence of public education before the Civil War, the Progressives’ push for direct democracy, the growing use (and fear) of propaganda techniques between the wars, the rise of opinion polling, the devaluation of political engagement during the Cold War, and the post-1960s renewal of emphasis on civic and political participation.  

Note: Expected to be given in 2014–15.

[*History 75f. Before and After 2012: History of the Maya] - (New Course)*  
Catalog Number: 58679 Enrollment: Limited to 12.  
*Kirsten A. Weld 6494*  
**Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17**  
An exploration - beginning with a look at the alleged Mayan prediction of the world’s end on December 12, 2012 - of the long history of the Maya past and present. Covers the ancient Maya, Mayan experiences of Spanish colonialism, and Mayan history and politics in modern Mexico and Central America. Critically examines representations and appropriations of indigenous peoples in scholarship, national narratives, and popular culture over time, and highlights examples of Mayan self-representation.

[*History 76a. Japanese Imperialism and the East Asian Modern]*  
Catalog Number: 6688 Enrollment: Limited to 12.  
*Ian J. Miller 5880 (on leave 2012-13)*  
**Half course (fall term). Hours to be arranged.**  
Explores the role of Japanese imperialism in the making of modern East Asia. By the 1940s Japan’s empire stretched from the cold northern woods of Sakhalin Island to Taiwan, Korea, China, and Southeast Asia. We use the analysis of this world-historical force to examine the tensions between modernization and imperialism across the region. Readings will take us to
Manchurian museums, Shanghai jazz clubs, and Burmese battlefields.

*Note:* Expected to be given in 2013–14. No knowledge of Japanese language or history required.

*History 76c (formerly History 90g). Major Themes in World History: Colonialism, Imperialism, and Post-Colonialism*

Catalog Number: 0119 Enrollment: Limited to 12.

**Hue-Tam Ho Tai 6079**

**Half course (fall term).** W., 2–4. **EXAM GROUP**: 7, 8

A general introduction to theories of imperialism, nationalism, and post-colonialism. Case studies to include Asia and Africa. Will combine the study of theory with examination of particular anti-colonial and anti-imperialist movements.

*History 76f (formerly History 1618). Telling Lives in Asia]*

Catalog Number: 9771 Enrollment: Limited to 12.

**Hue-Tam Ho Tai 6079**

**Half course (spring term).** **Hours to be arranged.**

Using sources ranging from diaries and memoirs to biographies, autobiographies, records of interrogations, resumes and self-criticisms, we will explore the ways in which individuals, both famous and ordinary, make sense of their lives in Asia. The focus will be on the upheavals of the twentieth century were experienced and how individual biographies and national histories enrich one another.

*Note:* Expected to be given in 2013–14.

*History 77a. Alcohol in Sub-Saharan Africa, 1850 to the Present]*

Catalog Number: 2765 Enrollment: Limited to 12.

**Emmanuel K. Akyeampong 3421**

**Half course (spring term).** **Hours to be arranged.**

Examines the uses and meanings of alcohol in precolonial and rural Africa, its place in European-African trading contacts, and its role in the process of colonization. The course ends with a review of alcohol in nationalist politics, the place of the alcohol industry in the economies of independent African states and addiction in contemporary Africa.

*Note:* Expected to be given in 2014–15.

*History 78d. Indigenous Histories and Settler Societies* - *(New Course)*

Catalog Number: 41912 Enrollment: Limited to 12.

**To be determined**

**Half course (spring term).** **Hours to be arranged.**

This course will examine a range of epistemological and methodological questions about the nature of historical knowledge and practice that have been prompted by the rise of indigenous histories or pasts in settler societies. Focusing on Australia, topics will include history, place and time; the demand for indigenous histories; memory, myth and oral tradition; history and the construction of Aboriginality; and role of representations of the past in making and settling political and legal claims.

*Note:* Expected to be given in 2013–14.
*History 78e. Cities and Borderlands in the History of the Modern Middle East - (New Course)*
Catalog Number: 70163 Enrollment: Limited to 12.
Arbella Herutha Bet-Shlimon
Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18
A seminar that engages with interdisciplinary case studies of Middle Eastern cities, towns, borderlands and hinterlands from a historical perspective. Areas to be covered include Cairo, Istanbul, Baghdad, planned oil company towns, provincial Levantine trade networks, and various disputed regions. Themes to be considered include the concept of space in history, the symbolisms of the metropolis, local and regional economic interactions, urbanization, notions of modernity, and intercommunal division and negotiation.

[*History 79a. The United States in International History]*
Catalog Number: 0735 Enrollment: Limited to 12.
Erez Manela 4762
Half course (fall term). Hours to be arranged.
An introduction to major themes and writings in U.S. international history. Topics include imperialism, internationalism, the Cold War, development, and globalization, with readings that combine classics with the cutting-edge.
Note: Expected to be given in 2014–15.

[*History 79e. Commodities in International History]*
Catalog Number: 17812 Enrollment: Limited to 12.
Alison Frank Johnson 5313
Half course (fall term). Hours to be arranged.
Introduces students to international history through the study of commodities ranging from oil, coal, and cotton to potatoes, rum, coffee, and sugar. Showcases historical writings that transcend geographic, cultural, and political boundaries between East and West, North and South, Atlantic and Pacific as well as methodological boundaries between cultural, economic, business, and environmental history, the history of food, of technology, and of ideas.
Note: Expected to be given in 2013–14.

*History 79i. Breaking Headlines: The History of News*
Catalog Number: 83327 Enrollment: Limited to 12.
Heidi Jacqueline Tworek 7054
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
This reading seminar introduces students to the major themes and approaches to the historical study of the media from the invention of modern newspapers in the seventeenth century to the multiplication of media today. We will examine how the meaning of news has emerged from a nexus of politics, economics, technology and society. Topics include journalism, propaganda, public opinion, news agencies, radio, television, and Twitter.

*History 79j. ‘The Oldest Profession? A Global History of Sex Work 1750 to the Present’ (with Philippa Hetherington) - (New Course)*
Catalog Number: 98463 Enrollment: Limited to 12.
Erez Manela 4762
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
The notion that prostitution is the ‘world’s oldest profession’ suggests both that sex work has a long history, and that this history is a homogeneous one based on unchanging gender roles and economic relations. In this course, students will learn to question the latter assumption, and examine the ways in which sex work, social attitudes towards it, and state attempts to regulate it or suppress it have changed over time.
Note: Instructor: Philippa Hetherington

[*History 79k. The United States and China: Opium War to the Present] - (New Course)
Catalog Number: 41121 Enrollment: Limited to 12.
Erez Manela 4762
Half course (fall term). Hours to be arranged.
This reading seminar will focus on the history of Sino-American relations and interactions since the Opium War (1840s). It will examine major episodes such as the Boxer intervention, the first and second world wars, the Korea and Vietnam wars, the Mao-Nixon rapprochement, and the post-Mao transformations, and explore central themes such as immigration, trade, culture, diplomacy, and security.
Note: Expected to be given in 2013–14.

*History 79l. The Decolonization of Canada, 1867–1967 - (New Course)
Catalog Number: 50027 Enrollment: Limited to 12.
Francine McKenzie 6489
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
Canadian historians usually explain Canada’s evolution from a British colony to an independent nation as a relentless transformation that began with Confederation in 1867 and ended with the Statue of Westminster of 1931. Studies of decolonization in the British Empire typically focus on so-called crown colonies rather than the dominions. Neither body of scholarship has explained Canada’s decolonization. This course re-examines the colony-to-nation narrative to explain how Canada achieved political, economic, cultural, and diplomatic independence.

Research Seminars

Required for History concentrators; open to non-concentrators as well. Concentrators planning to write a Senior Thesis must complete their Research Seminar requirement by the conclusion of the Junior year. Graduate students may enroll with the instructor’s permission.

Primarily for Undergraduates

[*History 80a. Roman Imperialism]
Catalog Number: 0336 Enrollment: Limited to 15.
Emma Dench 5243
Half course (spring term). Hours to be arranged.
Whether regarded as a model for European empires or as a precursor of western colonialism and globalization, Roman imperial expansion has captured both popular and scholarly imaginations. We proceed thematically, analyzing a variety of textual and material evidence for the changing nature of Roman imperialism between the mid-Republican and early imperial periods, and its
impact on the politics, culture, religion, and society of Roman and local communities alike.  
*Note: Expected to be given in 2013–14.*

[*History 80e. From Gaul to France: The History, Archaeology and Science of the Fall of the Roman Empire*]
Catalog Number: 52674 Enrollment: Limited to 15.  
*Michael McCormick 2849*
*Half course (spring term). Hours to be arranged.*
What was the fall of the Roman Empire like in Gaul? We will use archaeology, ancient texts in translation, Roman material culture (coins, ceramic), natural scientific data and computers to try to answer this question and discover how Gaul ended and France began between about 200 and 500 A.D. Reading knowledge of French or German will expand the fun but is not necessary.  
*Note: Expected to be given in 2013–14.*

[*History 80f. Carolingian Civilization*]
Catalog Number: 10546 Enrollment: Limited to 15.  
*Michael McCormick 2849*
*Half course (spring term). Hours to be arranged.*
What were the distinctive features of Charlemagne’s civilization in terms of its value systems, economic and environmental structures, and social and cultural features? Meetings will pair student critiques or original essays on each theme with close analysis or written, natural scientific, GIS and archaeological evidence, and teach students how to conduct a major research project, from finding a topic to a finished paper, via oral presentation.  
*Note: Expected to be given in 2013–14.*

[*History 80g. Travelers to Byzantium - (New Course)*]
Catalog Number: 27137 Enrollment: Limited to 15.  
*Dimiter Georgiev Angelov 7002*
*Half course (fall term). M., 2–4. EXAM GROUP: 7, 8*
This seminar is based on the fascinating firsthand accounts of travelers who visited Constantinople and other areas of Byzantine world. The texts will generate questions for discussion and research on a wide range of issues, such as Byzantine civilization, cross-cultural contacts in the Middle Ages, the practice and experience of travel, and the interrelationship of travel, ethnography, and politics. Sources will be chosen from among the works of western, Islamic, Jewish, and Russian travelers.

[*History 81c. The English Revolution*]
Catalog Number: 0296 Enrollment: Limited to 15.  
*Mark A. Kishlansky 2895*
*Half course (spring term). M., 1–3.*
This course will fulfill the concentration requirement for a research course requiring the completion of an historical essay based on primary materials. It will explore the causes, course, and consequences of the English Revolution by focusing on selected topics covering the range of issues that dominated the period from the convening of the Lord Parliament to the execution of Charles I. Emphasis will be on research techniques and the use of seventeenth century sources.
*History 81f. Women’s Voices in Medieval and Early Modern Europe*
Catalog Number: 7597 Enrollment: Limited to 15.
Rachel L. Greenblatt 5537
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
Seeks out the voices of Jewish, Protestant and Catholic women, with an emphasis on women’s writings, and examines methods for uncovering information about women’s lives when their own voices are absent from the historical record. Considers ideal images and the daily realities of both men’s and women’s gendered roles in such areas as life-cycle rituals, livelihood and spirituality.

[*History 81j. What Was an Early Modern Author?]*
Catalog Number: 75134 Enrollment: Limited to 15.
Ann M. Blair 2467
*Half course (spring term). Hours to be arranged.*
This course, designed for advanced undergraduates and graduate students, will examine forms of authorship in early modern Europe broadly defined and the contextual factors that help explain them. Topics include: authenticity and plagiarism, collaborations, compilations, anonymous and pseudonymous writing, women’s authorship and the rise of the romantic author. Students will write a research paper on a topic of their choice.
*Note:* Expected to be given in 2013–14.

*History 82b. Fin-de-Siècle Vienna*
Catalog Number: 1471 Enrollment: Limited to 15.
Alison Frank Johnson 5313
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*
Explores the history of the political, social, and cultural center of the largest continental European Empire in modern history, and one of the birthplaces of European modernism. From the 1880s through WWI and into the early years of the Republic of Austria, the course examines not only Vienna’s intellectual vitality, but also the social and ideological divisions underlying the human catastrophes of World War and genocide in the twentieth century.

[*History 82c. Vichy France]*
Catalog Number: 8154 Enrollment: Limited to 15.
Patrice Higonnet 2730 (on leave spring term)
*Half course (fall term). Hours to be arranged.*
First, we cover the background of the Vichy years and the legacy of 1789 and the First World War; military affairs; Vichy’s social policy; Vichy, the Germans, and the Jews; Vichy and Free France; and the legacy of the Vichy years. In the second half of the course, we move on to compare occupied France to other occupied countries of Europe.
*Note:* Expected to be given in 2014–15. Students interested in this course should contact Professor Higonnet at higonnet@fas.harvard.edu. Films will be shown weekly.

[*History 82d. French Colonial Encounters: 1870’s to Present]*
Catalog Number: 0461 Enrollment: Limited to 15.
Mary D. Lewis 4369
*Half course (spring term). Hours to be arranged.*
Explores and compares three colonies in the French Empire: French West Africa, Algeria, and Indochina, considering how colonial rule was extended, how individuals responded, and what reverberations there were between colony and metropole.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* One language relevant to the regions studied (e.g. French, Arabic, Vietnamese, etc.) preferred but not required. An introduction to French history recommended.

**History 82f. The Origins of the Cold War: The Yalta Conference (1945)**  
Catalog Number: 1959 Enrollment: Limited to 15.  
*Serhii Plokhi* 4454  
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17  
The Yalta Conference is analyzed in the context of the long-term geostrategic goals of the United States, the United Kingdom, and the USSR. Special attention is paid to psychological and cultural aspects of the negotiating process.

**History 82l (formerly History 2242r). The French Revolution**  
Catalog Number: 1914 Enrollment: Limited to 15.  
*Patrice Higonnet* 2730 (on leave spring term)  
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17  
The history of Jacobinism during the French Revolution.

**History 82m. The Modern Mediterranean: Connections and Conflicts between Europe and North Africa - (New Course)**  
Catalog Number: 92643 Enrollment: Limited to 15.  
*Mary D. Lewis* 4369  
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16  
This course examines relations between European and North African societies, economies, and peoples from the age of "Barbary Piracy" through colonial conquests, anti-colonial nationalism and decolonialization, to post-World War II migrations and reverberations from the "Arab Spring" of 2011. Students will consider crucial turning points in European-North African relations and will write a substantial research paper focusing in on some aspect of Mediterranean history in the modern era.

**[History 82n. Mapping History] - (New Course)**  
Catalog Number: 71335 Enrollment: Limited to 15.  
*Kelly A. O’Neill-Uzgiris* 5881  
Half course (spring term). Hours to be arranged.  
This course explores the history of maps and mapping from the age of Enlightenment to the era of Google and GIS. Maps are a universal medium for conveying geographic information; they are also rich sources for understanding how mobility, exchange, and interaction have shaped human experience. Students will learn how to read maps; they will also learn how to construct them as part of an original research project. Topics include famine, migration, voyages of exploration.  
*Note:* Expected to be given in 2013–14.
*History 82o. Crises, Promises, Tragedies: The History of Weimar Germany, 1918-1933 - (New Course)
Catalog Number: 19432 Enrollment: Limited to 15.
Julia Timpe 6496
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
This research seminar deals with Germany’s ambiguous history from 1918-1933, the period referred to as the "Weimar Republic," an era of great turmoil in politics, society, arts and culture. We will explore topics that show how Weimar can be characterized as a time of chronic conflicts, instability and political violence and extremism, but also themes and topics speaking to the period’s great promise and its important political and social changes as well as great cultural innovations.

*History 83a. Markets and States: The History of Economic Thought Since 1750
Catalog Number: 5927 Enrollment: Limited to 15.
Emma Rothschild 5001
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Examines the history of various kinds of economic thought, including 18th century laissez-faire political economy and late 19th century theories of economic and social reform. Will consider writings in different media from scientific theories to economic periodicals. Students will prepare individual research projects.

[*History 83c. Care of the Soul]
Catalog Number: 8082 Enrollment: Limited to 15.
James Hankins 1239
Half course (spring term). Hours to be arranged.
The teachings of major philosophers in the Western tradition about how living a philosophical life can cure diseases of the soul and bring tranquility, harmony with nature, and a sense of moral worth.
Note: Expected to be given in 2013–14.

*History 84c. Confronting Objects/Interpreting Culture: Interdisciplinary Perspectives on North America
Catalog Number: 2479 Enrollment: Limited to 12.
Laurel Thatcher Ulrich 1886
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Working with museum collections as well as written documents, students will explore the interplay between particular objects and larger historical themes, such as colonialism, nationalism, scientific and ethnographic exploration, or expanding commerce. Employing a range of scholarly tools, emphasizing visual and material analysis and including archival research, students will help prepare materials for a future exhibit.

*History 84e. How to Read a Book - (New Course)
Catalog Number: 90475 Enrollment: Limited to 15.
Jill M. Lepore 4830 and Leah Price 3501
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
This hands-on interdisciplinary undergraduate seminar is for students who want to think about
what a book is and how to read one. Readings include historical and literary narratives of reading by Cervantes, Richardson, Franklin, Sterne, Ellison, and Bradbury, together with research exercises in Harvard library and museum collections.

[*History 84g. Harvard and Slavery]
Catalog Number: 1778 Enrollment: Limited to 15.
Sven Beckert 2415 (on leave 2012-13)
Half course (fall term). Hours to be arranged.
Will explore the links between Harvard and slavery during the first 229 years of the university’s history. Students will write original research papers on various aspects of the history of Harvard University and slavery, including how resources extracted from slave labor benefited the university, the ways Harvard administrators and faculty supported or struggled against the institution of slavery, and what kinds of links the university built to slaveholders.
Note: Expected to be given in 2013–14.

*History 84h. The Northern Side of the Civil Rights Movement
Catalog Number: 8594 Enrollment: Limited to 15.
Evelyn Brooks Higginbotham 3517
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Examines the movement for racial equality outside the South from the 1940s and into the early 1970s, and will examine integrationist efforts, as well as competing ideologies of black power through weekly urban case studies.

[*History 84i. Secularization in Europe and the United States, c. 1780-2000]
Catalog Number: 6171 Enrollment: Limited to 15.
David Neil Hempton (Divinity School) 5974
Half course (spring term). Hours to be arranged.
It is commonly asserted that the United States is more religious and less secular than Europe. The purpose of this seminar is to test that claim by looking at the respective religious characteristics of these two large and diverse areas from the age of revolution in the late eighteenth century to the present. Among the topics to be considered in comparative religious perspective are industrialization and modernization, the rise of cities, the fate of established churches, the relationship between religion and popular culture, patterns of immigration, and trajectories of secularization. In the light of these comparisons, the course will address the complex issues at stake in the debates between those who make claims either for American or European exceptionalism.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2356.

*History 84j. Urban America in the Twentieth Century - (New Course)
Catalog Number: 31043 Enrollment: Limited to 15.
Samuel Zipp (Brown University) 6497
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
This research seminar will give advanced undergraduate students the opportunity to investigate recent scholarly work on the history of 20th century American cities and suburbs. Students will develop their own research topic and write an historical essay drawn from investigation of
primary documents and relevant secondary literature. Readings will be drawn from recent research in cultural, political, and social history and American Studies.

[*History 84m (formerly History 1670). The New Deal: The United States during the Roosevelt Years]*
Catalog Number: 4878 Enrollment: Limited to 15.
Lisa M. McGirr 2543 (on leave 2012-13)
Half course (fall term). Hours to be arranged.
An exploration of the trajectory of New Deal reform and the broader social, economic, political, and cultural changes in the US in this period. Topics will include the First and Second New Deal, the rise of liberalism, the Roosevelt administration, the social movements of the Left and the Right during the 1930s, the coming of war, and the waning of the reform impulse.
Note: Expected to be given in 2013–14.

[*History 84x. The US and Europe in Twentieth-Century Thought and Culture - (New Course)]*
Catalog Number: 77536 Enrollment: Limited to 15.
Andrew Jewett 5878
Half course (spring term). W., 4–6. EXAM GROUP: 9
This seminar explores the intellectual and cultural dimensions of the complex relationship between Europe and the United States in the twentieth century. You will also contribute to telling the story of that relationship, by producing a long research paper based on original sources. Shared readings will provide a common fund of knowledge and a common language for discussion.

[*History 86d. The Indian Ocean in Comparative Perspective]*
Catalog Number: 8123 Enrollment: Limited to 15.
Sugata Bose 3960
Half course (spring term). Hours to be arranged.
Explores the history of the Indian Ocean inter-regional arena in the comparative context of histories of the Atlantic, Mediterranean and the Pacific worlds from the 1490s to the 1990s. The changing meanings of sovereignty, religiously informed universalisms and the links forged by intermediary capital and migrant labor in the age of global empire.
Note: Expected to be given in 2013–14.

[*History 86e. Nation, Reason and Religion in South Asia]*
Catalog Number: 1447 Enrollment: Limited to 15.
Sugata Bose 3960
Half course (spring term). Hours to be arranged.
Examines the connections between nation, reason and religion in South Asian political thought and practice. Precolonial patriotisms, rational and religious reforms, colonial modernity and anti-colonial nationalisms, visions of nationhood and forms of state power, and post-colonial nationalisms for and against the state.
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.
[*History 86f. Tagore and his Times]
Catalog Number: 81003 Enrollment: Limited to 15.
Sugata Bose 3960
Half course (fall term). Hours to be arranged.
An exploration of global cultural history through the life and literature of Rabindranath Tagore (1861-1941), and his engagements with intellectuals worldwide.
Note: Expected to be given in 2014–15.

*History 86h. Asia after Europe - (New Course)
Catalog Number: 20604 Enrollment: Limited to 15.
Sugata Bose 3960
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
The history of the decline and rise of a continent between 1813 and 2013 in the domains of economy, politics and culture.

[*History 87a. Health, Disease, and Ecology in African History]
Catalog Number: 5905 Enrollment: Limited to 15.
Emmanuel K. Akyeampong 3421
Half course (fall term). Hours to be arranged.
Examines the history of disease and health in sub-Saharan Africa from the 19th century to recent times, exploring African and western concepts of health, disease and healing. Illustration through discussion of case studies of individual diseases, including malaria/sickle cell trait, trypanosomiasis, tuberculosis, sexually transmitted diseases, alcoholism, AIDS, and onchocerciasis, and the public health policies affecting them.
Note: Expected to be given in 2014–15.
Prerequisite: Senior level undergraduates.

[*History 88b. Medieval History and Cinema]
Catalog Number: 70486 Enrollment: Limited to 15.
Cemal Kafadar 2459 (on leave 2012-13)
Half course (spring term). Hours to be arranged.
This course deals with the challenges of representing medieval history by focusing on selected films, which will be viewed at two levels at once, as films and as history. What are the uses of cinema as a vehicle for thinking about the past? What qualities, other than accuracy, make for good history in films? What are the advantages, if any, of cinematic representation of the premodern past with its different sense of intimacy with the supernatural?
Note: Expected to be given in 2013–14. There will be a group viewing of selected films each week and a class meeting to discuss films and related readings.

*History 88c. Modern Iraq in the Media and in Historical Perspective - (New Course)
Catalog Number: 33748 Enrollment: Limited to 15.
Arbella Herutha Bet-Shlimon
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
A research seminar that applies historical modes of analysis toward a nuanced understanding of contemporary Iraq, especially as it is covered in the news media. Readings include texts from history, political science, anthropology, and journalism. Questions to be considered include: is
conflict between sects inevitable? Will Iraq ever be democratic? And are Western interventions in Iraq always about the oil?

[*History 89a. British Colonial Violence in the 20th Century]*
Catalog Number: 4626 Enrollment: Limited to 15.
*Caroline M. Elkins 3961 (on leave 2012-13)*
*Half course (spring term). Hours to be arranged.*
Will explore Britain’s deployment of various forms of violence in its 20th-century empire, and how this violence was understood, justified, and represented in the empire and at home. Imperial objectives and policies will be weighed alongside local factors such as race, settler presence, indigenous responses to colonial rule, and economic and strategic interests to assess the universality and particularity of British colonial violence.
*Note:* Expected to be given in 2013–14.

*History 89h. Henry Kissinger: Statecraft in Theory and Practice - (New Course)*
Catalog Number: 38953 Enrollment: Limited to 15.
*Niall Ferguson 4938 (on leave spring term)*
*Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17*
As National Security Adviser and Secretary of State, Henry Kissinger was the architect of the policy of détente with the Soviet Union, of the "opening" to China, and of the effort to salvage "peace with honor" in Vietnam. Yet Kissinger should be understood as a scholar as well as a statesman. Using selections from his writings, this seminar will assess Kissinger in his own terms and in the context of modern international history.

*History 89i. Planning for Peace during the Second World War - (New Course)*
Catalog Number: 65134 Enrollment: Limited to 15.
*Francine McKenzie 6489*
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*
Against the backdrop of the Second World War, bureaucrats, politicians, and diplomats around the world planned a peaceful postwar world. This course examines those plans, key planners, and the international negotiations out of which a sprawling postwar architecture emerged. Some of the institutions and initiatives that were established include the United Nations, the Food and Agricultural Organization, the International Monetary Fund, and the Universal Declaration of Human Rights.

*Ancient and Medieval History*

*Primarily for Undergraduates*

*Cross-listed Courses*

[Aesthetic and Interpretive Understanding 49 (formerly Medieval Studies 114). The Medieval Imagination: Visions, Dreams, and Prophecies]*

*Culture and Belief 51. Making the Middle Ages - (New Course)*

*Freshman Seminar 39e. Rome and China - (New Course)*
*History and Literature 90g. Charlemagne in History, Story, and Myth
[Societies of the World 41 (formerly History 1050). Medieval Europe]*

**For Undergraduates and Graduates**

**History 1011. The World of the Roman Empire**
Catalog Number: 45321
Emma Dench
Half course (fall term). Tu., Th., at 12, and a weekly section to be arranged. EXAM GROUP: 14
An introduction to Roman history from the mid third century BCE to the mid third century CE, with emphasis on the multiple cultures of the Roman empire and their diverse involvement in, and perspectives on, Roman conquest and rule. Challenging traditional narratives of Roman political history, we will seek a much more dynamic view of ‘Roman’ culture and society, based on both literary and archaeological evidence.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[History 1012. Identity in Classical Antiquity]
Catalog Number: 69822
Emma Dench
Half course (fall term). Hours to be arranged.
What did it mean to be Greek, Athenian, or Roman in classical antiquity? We explore the different ways in which such identities were articulated from the archaic Greek world to the world of the Roman Empire, considering textual and archaeological evidence.
*Note:* Expected to be given in 2013–14.

**History 1035. Byzantine Civilization - (New Course)**
Catalog Number: 42244
Dimiter Georgiev Angelov
Half course (spring term). M., W., at 11, and a weekly section on Thursday at 2. EXAM GROUP: 4
The Byzantine (Eastern Roman) Empire outlived the fall of Rome by a thousand years. In what ways did Byzantium preserve the institutions and politics of imperial Rome? In what ways was it a medieval civilization? How did Byzantium’s professional armies, able diplomats, and brilliant intellectuals ensure its survival and renewed expansion? This course traces the story of the Byzantine Empire between c. 600 and 1453, setting it in the context of medieval and world history.

[History 1040. The Fall of the Roman Empire]
Catalog Number: 6019
Michael McCormick
Half course (fall term). Hours to be arranged.
Uses the latest results of archaeology, written sources, and the natural sciences to study the changes, violent or subtle, that transformed the Roman world to produce medieval civilization
between ca. 300 and 700. Topics include Constantine’s conversion, economic recovery and collapse, the barbarians, women and power, pandemic disease; emphasizes reading of ancient sources in translation.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**[History 1041 (formerly Historical Study B-13). Charlemagne and the Birth of Medieval Civilization]**

Catalog Number: 2567

*Michael McCormick*

*Half course (spring term). Hours to be arranged.*

For 200 years, the family of Charlemagne welded together the disparate fragments of a fallen Roman Empire and free Germania. The result was a new civilization, called Europe; a new cultural movement, called Renaissance. “Charlemagne” investigates how a new civilization arose in the countryside and in the conquests of the 8th and 9th centuries AD with consequences that endure down to our own time. But “Charlemagne” is also about historical analysis: the techniques by which today’s historians wrest new data and insights from manuscripts, memorandums, and mud to rediscover the lives of the men and women who created the first European civilization.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**[History 1060. Europe and Its Borders, 950-1550]**

Catalog Number: 0914

*Daniel L. Smail*

*Half course (spring term). Hours to be arranged.*

Surveys an early phase of European expansion and colonial activity in areas including the Iberian Peninsula, Sicily, the eastern Mediterranean, eastern Europe, the Baltic lands, Wales, and Ireland. A major goal of the course is to explore how a European identity emerged in the process of contact and conflict in the new borderlands. Readings will include primary and secondary sources.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Cross-listed Courses**

**Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe - (New Course)**

**Medieval Studies 107. Authority and Invention: Medieval Art and Architecture**

**Primarily for Graduates**

**[History 2050. Medieval Societies and Cultures: Proseminar]**

Catalog Number: 6693
Michael McCormick
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Introduction to the study of medieval history, and to the literature basic to the examination field. Stress on classic and innovative scholarship about medieval society, economy, institutions and culture.
Note: May not ordinarily be credited as one of the research seminars required in the first-year program.
Prerequisite: Reading knowledge of French and/or German.

[History 2055hf (formerly History 2055). Early Medieval History: Communications in the Early Medieval Mediterranean: Seminar]
Catalog Number: 5011
Michael McCormick
Half course (throughout the year). Hours to be arranged.
Will meet in two concurrent phases: alternate Monday Seminars, with joint philological analysis of Latin texts culminating in a research paper, and Tuesday afternoon Workshops which will feature innovative research presentations by Harvard and visiting historians, archaeologists and scientists.
Note: Expected to be given in 2013–14.
Prerequisite: Latin, with either German or French, is required. Normally History 2050 and or MS 101.

[History 2060. Topics in Medieval and Early Global History: Seminar]
Catalog Number: 1874
Daniel L. Smail
Half course (spring term). Hours to be arranged.
This course is designed to introduce graduate students to the sources and methodologies necessary to conduct research on medieval Europe.
Note: Expected to be given in 2013–14.

History 2080. Medieval Law
Catalog Number: 3140
Charles Donahue, Jr. (Law School)
Half course (spring term). Tu., 5–7 p.m. EXAM GROUP: 18
Readings focused alternately on the English legal tradition and on the Roman-canonical tradition. The topic for 2012-13 will be the Roman-canonical tradition. Short papers analyzing texts will be required but not a research paper.
Note: Offered jointly with the Law School as Law 2166.
Prerequisite: Some Latin required.

Cross-listed Courses

Classical Philology 226. Memories of the Roman Republic
*Medieval Studies 202. Latin Palaeography and Manuscript Culture: Seminar
Medieval Studies 223. Preaching and the Sermon in the Middle Ages
Graduate Courses

Cross-listed Courses

*Medieval Studies 300hf (formerly Medieval Studies 300). Medieval Studies Interdisciplinary Workshop

Renaissance and Early Modern History

See also Committee on Medieval Studies. Students are also directed to Divinity School courses.

Primarily for Undergraduates

Cross-listed Courses

*History and Literature 90aj. America Through European Eyes - (New Course)

For Undergraduates and Graduates

History 1133. The British Revolutions - (New Course)
Catalog Number: 26014
Mark A. Kishlansky
Half course (fall term). M., W., (F.), at 1, and a weekly section to be arranged. EXAM GROUP: 6
This course will explore the causes and consequences of the political upheavals that transformed Britain during the seventeenth century. The English Revolution witnessed the first trial and execution of a lawful monarch in European history. The so-called Glorious Revolution of 1688-89 made Britain a great European power. Why was it necessary for Britons to overthrow constituted authority and how did they do it? Readings will include works from among James I, the Levellers, Milton, Hobbes, and Locke as well as writings of modern historians. No prior knowledge expected.

History 1144 (formerly Historical Study B-19). The Renaissance in Florence
Catalog Number: 4631
James Hankins
Half course (fall term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
The Renaissance has been described by historians as a revival of antiquity, as a revolt against the Middle Ages, and as the beginning of the modern world. This course examines these claims in the context of a detailed examination of the society and culture of Florence, the most important Renaissance center, from the time of Dante to the time of Machiavelli.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for either Historical Study B or Literature and Arts C, but not both.
2012-2013 Previous Courses of Instruction

[History 1151. Culture and Society in Early Modern France, 1500-1715]
Catalog Number: 7575
Ann M. Blair
Half course (fall term). Hours to be arranged.
An introduction to French history from Francis I through Louis XIV, with a special emphasis on topics in cultural history, including: Renaissance humanism and printing, Protestantism and wars of religion, political thought, court culture and the early Enlightenment. Assigned readings from Rabelais, Montaigne, Pascal, Molière, and Voltaire among the primary sources; from Fernand Braudel, Natalie Davis, and Robert Darnton among the secondary sources. All assignments in English.
Note: Expected to be given in 2013–14. An optional extra French-language reading section will be arranged if there is interest, which can count toward the foreign language requirement in History and Literature; a graduate section will be arranged.

History 1155. Early Modern Europe, 1450-1789 - (New Course)
Catalog Number: 56228
Noah Chaim Millstone
Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15
This course offers a general survey of European history from the end of the Middle Ages to the French Revolution. Major topics include the Renaissance and Reformation, exploration and imperialism, state formation, religious conflict and absolutism, the scientific revolution and the Enlightenment.

[History 1167 (formerly Historical Study B-18). The Protestant Reformation]
Catalog Number: 0623
Steven Ozment
Half course (spring term). Hours to be arranged.
In the 16th century hundreds of thousands of people surrendered religious beliefs, practices, and institutions that had organized and given meaning to daily life for the greater part of a millennium. The Protestant Reformation attempts to explain why this happened and how it changed history. Lectures, art, and readings present the movers and shakers of the Reformation; its development in representative cities and lands; its theologies and social philosophies; its impact on contemporary society and culture; the Catholic response; and its legacy to the modern world.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

Cross-listed Courses

Celtic 118. The Gaelic World: 12th Century to 17th Century
Medieval Studies 119. Constitutional and Legal History of Medieval Continental Europe

Primarily for Graduates
[History 2110. Problems in Late Medieval, Renaissance/Reformation, and Early Modern Europe: Seminar]
Catalog Number: 50731
Steven Ozment
Half course (fall term). Hours to be arranged.
History 2110 is designed for beginning graduate students and upper level undergraduates in search of a senior thesis, or pursuing a special interest. This course addresses both cutting edge historical debates and student presentations of topical readings chosen in consultation with Mr. Ozment.
Note: Expected to be given in 2013–14.

*History 2112. Latin Texts of the Italian Renaissance: Proseminar
Catalog Number: 0140
James Hankins
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Introduction to methods and techniques of textual scholarship with reference to Renaissance Latin texts. Topics include finding and describing manuscript and printed sources; paleography and codicology; text editing; rhetorical analysis. Course includes a six-week paleography workshop held in Houghton Library.
Note: Enrollment by permission of the instructor. May not ordinarily be credited as one of the research seminars required in the first-year program.
Prerequisite: A reading knowledge of Latin, French, Italian, and German.

*History 2132. Early Modern England: Seminar
Catalog Number: 7105 Enrollment: Limited to 10.
Mark A. Kishlansky
Half course (spring term). Hours to be arranged.
Students will conduct primary research on topics of significance in the history of England, ca. 1563–1714.
Note: Permission of instructor required.

[History 2133. Studies in Tudor and Stuart History: Proseminar]
Catalog Number: 1428
Mark A. Kishlansky
Half course (spring term). Hours to be arranged.
A graduate colloquium designed for students preparing preliminary examinations in early modern history or interested in English historiography of the early modern period. Historiographical papers and reviews.
Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

Cross-listed Courses

[Medieval Studies 201 (formerly Medieval Studies 101). The Auxiliary Disciplines of Medieval History: Proseminar]

Modern European History
Primarily for Undergraduates

Cross-listed Courses

Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
[Ethical Reasoning 12. Political Justice and Political Trials]
*Freshman Seminar 46e. The Germans and Their History
*History and Literature 90am. The Legacy of War in Modern Europe: Forgetting and Remembering after 1945
Societies of the World 14 (formerly Historical Study A-88). The British Empire
Societies of the World 18 (formerly History 1205). Europe Since the Second World War
[Societies of the World 19. Western Ascendancy: The Mainsprings of Global Power from 1600 to the Present]
[Societies of the World 28. Exploration and Empire Building]

For Undergraduates and Graduates

[History 1214. Encountering of the Other: The Expansion of the Christian West, 1650-1830]
Catalog Number: 2392
David Hempton (Divinity School)
Half course (fall term). Hours to be arranged.
Investigates themes in the History of Christian Expansion to new geographical spaces in the early modern period. Questions raised will include what was at stake in the multifaceted cultural encounters between European Christianity and native religious traditions as Christianity expanded into new social spaces, and what was the relationship between Protestant and Roman Catholic missionary movements and the rise of the European seaborne empires. Locations will include the Americas, Africa, India, and Asia.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2355.

[History 1224. Britain since 1760: Island, Europe, Empire]
Catalog Number: 2630
Maya Jasanoff
Half course (fall term). Hours to be arranged.
Survey history of Great Britain from the reign of George III to the administration of Tony Blair. These centuries witnessed Britain’s spectacular emergence as the world’s leading industrial and imperial power; and its dramatic decline in influence after World War II. How did Britons experience domestic and global change? Themes include political reform, social class, national identity, popular culture, rise and fall of empire, relations with Europe. Extensive use of written and visual primary sources.
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[History 1251 (formerly 1451). The History of France from 1715-1958]
Catalog Number: 6683
Patrice Higonnet
Half course (fall term). Hours to be arranged.
France from the death of Louis XIV to the French Revolution and its echoes in the Revolutions of 1830, 1848, 1871 and the collapse of the Third Republic in 1940. The rise and fall of France as an imperial power and as victor and loser of two world wars. Other themes include the history of Paris and cultural change in letters and the arts, with the move from Enlightenment to romanticism, realism, and surrealism.
Note: Expected to be given in 2014–15.

[History 1253 (formerly Historical Study B-35). The French Revolution: Causes, Processes, and Consequences]
Catalog Number: 0525
Patrice Higonnet
Half course (fall term). Hours to be arranged.
The cultural, social, and political life of France before 1789; the rise of a public sphere; the Revolution in its development from the decentralized “consensus” of 1789 to Jacobin terrorism in 1793–94; the structures of Jacobin thought; the ideological, social, and administrative effects of the Revolution in France. The roles of Mirabeau, the Montagnards, the Girondins, Robespierre, Babeuf, and Napoleon are considered, as well as more general themes such as the effect of public opinion and the redefinition of gender roles.
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

[History 1257. History of European Capitalism: Conference Course]
Catalog Number: 24891
Sven Beckert
Half course (spring term). Hours to be arranged.
During the past 250 years, Europe’s economies were revolutionized by the advent and spread of capitalism. Exploring the origins and economic, political, social and cultural consequences of this change, this course will deal with a wide range of issues from the transformation of the countryside in eighteenth century England, to the emergence of heavy industry in the Ruhr Valley a hundred years later, to the history of European labor movements. We will pay special attention to the connections between Europe and the rest of the world and the varieties of capitalism as they came to characterize the European continent.
Note: Expected to be given in 2013–14.

[History 1266. Central Europe, 1789-1918: Empires, Nations, States]
Catalog Number: 3736
Alison Frank Johnson
Half course (spring term). Hours to be arranged.
Examines the development of nationalism and socialism as ideologies intended to shape group loyalties, public and private behavior, and political activities of subjects of the continental European empires in the long nineteenth century. Primary focus will be on the Habsburg Empire, with attention paid to other German-speaking lands and to the western territories of the Russian Empire (especially Poland).
Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for
Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**History 1270. Frontiers of Europe: Ukraine since 1500**
Catalog Number: 1910
Serhii Plokhi
*Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*

The history of Ukrainian territory and its people within a broad context of political, social and cultural changes in Eastern Europe in the course of the half of a millennium. Special emphasis on the role of Ukraine as a cultural frontier of Europe, positioned on the border between settled areas and Eurasian steppes, Christianity and Islam, Orthodoxy and Catholicism, as well as a battleground of major imperial and national projects of modern era.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**History 1272. Consent and Coercion: The History of Nazi Germany - (New Course)**
Catalog Number: 86061
Julia Timpe
*Half course (spring term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

This lecture course explores the history of Nazi Germany, with a particular focus on its social, cultural and everyday history. Our core concern will be practices of consent and coercion. We will focus on perpetrators and victims, fellow-travelers and the beneficiaries of the regime. The course will explore the everyday lives of different sections of German society, Nazi ideology and historical developments up to and during World War II and the Holocaust.

**History 1280. History of the Soviet Union, 1917-1991**
Catalog Number: 4501
Terry D. Martin
*Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12*

Examines the history of the Soviet Union from the Russian Revolution to Gorbachev’s failed reforms. Focus on the period 1928-53 when industrialization, nationalization and political terror created a distinct Soviet society and culture. Readings include novels, short stories, memoirs, Soviet propaganda, high policy deliberations, letters, journalism, songs, jokes, etc.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures or Historical Study A, but not both.

**[History 1282. The Russian Revolution: An International History]**
Catalog Number: 68318
Terry D. Martin
*Half course (spring term). Hours to be arranged.*

Analyzes the 1917 Russian Revolution as the central event in the revolutionary transformation of Eurasia from 1905 to 1934. Considers the 1905-1912 revolutions in Russia, Turkey, Persia, and China; the 1917-18 collapse of the German, Austro-Hungarian, Russian, and Ottoman empires
and ensuing revolutions and civil war; ends with Stalin’s Revolution from Above, Hitler’s Nazi Revolution, and Mao’s Long March. Themes includes revolution, civil war, state collapse, ideology, violence, and the transnational political contagion.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement Societies of the World or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**History 1290. The History of the Russian Empire**
Catalog Number: 9566
Kelly A. O’Neill-Uzgiris
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
The history of Russia from the conquest of Kazan and Astrakhan in the sixteenth century to 1917. Topics include the struggle with “westernization”, the nature of autocratic authority, the role of the Orthodox Church, the integration of non-Russian peoples, industrialization and modernization, and the inevitability of the revolutions of 1905 and 1917.

Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**Cross-listed Courses**

**Celtic 119. The Gaelic World: 17th Century to the Present**

**Primarily for Graduates**

**History 2250. Interpreting Europe’s Twentieth Century: Seminar - (New Course)**
Catalog Number: 62761
Charles S. Maier
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Historical and theoretical analyses of crises and transformation: critiques of liberalism; fascism and communism; legacies of world war and empire; postwar institutional constructions; ideological revival from the 1960s to the collapse of communism; global redimensioning.

**History 2259. Readings in Central European History: Proseminar - (New Course)**
Catalog Number: 73454
Alison Frank Johnson
Half course (spring term). Hours to be arranged.
Introduces students to recent and classic literature on German-speaking Europe as well as the Habsburg Empire, the Polish-Lithuanian Commonwealth, and their successor states. Some discussion of Southeastern Europe. Reading knowledge of German or another approved Central/Eastern European language advisable, but not required. Open to graduate students and qualified undergraduates with permission of the instructor.

**History 2260. Central Europe: Seminar**
Catalog Number: 6464 Enrollment: Limited to 12.
Alison Frank Johnson
Half course (fall term). Hours to be arranged.
Major themes include nationalism, communism, the ‘Polish question,’ the ‘Jewish question,’ the political and economic viability of the Habsburg Empire, cultural exchange and diplomatic relations between Austria, Germany and the Russian Empire/Soviet Union.
Note: Expected to be given in 2014–15.
Prerequisite: Reading Knowledge of either German, Polish, Czech, or another Central European language.

[History 2271. The Soviet Union: Proseminar]
Catalog Number: 2405
Terry D. Martin
Half course (fall term). Hours to be arranged.
Introduction to major debates in the historiography of the Soviet Union and late imperial Russia.
Note: Expected to be given in 2013–14.

History 2272. The Soviet Union: Seminar
Catalog Number: 7969
Terry D. Martin
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Introduction to archival and primary sources, as well as major historiographical debates. Primary focus on major research paper.
Prerequisite: Reading knowledge of Russian.

[History 2285. Imperial Russia: Proseminar]
Catalog Number: 48104 Enrollment: Limited to 12.
Kelly A. O’Neill-Uzgiris
Half course (spring term). Hours to be arranged.
Intensive introduction to major themes and approaches to the history of imperial Russia. Prepares students for the general exam but all interested graduate students are welcome.
Note: Expected to be given in 2014–15.

Cross-listed Courses

Government 2887. Imperial Legacies and International Politics in the Post-Soviet Space

Intellectual History

Primarily for Undergraduates

Cross-listed Courses

Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
[Culture and Belief 50. The European Postwar: Literature, Film, Politics]

For Undergraduates and Graduates
[History 1300. Western Intellectual History: Greco-Roman Antiquity]
Catalog Number: 6308
James Hankins
Half course (fall term). Hours to be arranged.
A survey of major themes in the intellectual history of the Greek and Roman World, with special attention to metaphysics, psychology, ethics and the philosophic life. Readings in the Presocratics, Plato, Aristotle, Lucretius, Epictetus, Cicero, Seneca, Marcus Aurelius, Plotinus, Augustine, and Boethius.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B or Moral Reasoning, but not both.

[History 1301. Western Intellectual History II: The Prehistory of Modern Thought]
Catalog Number: 7573
James Hankins
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[History 1323. German Social Thought, Nietzsche to Habermas]
Catalog Number: 78728
Peter E. Gordon
Half course (fall term). Hours to be arranged.
A philosophical and historical survey of major debates in modern German social theory over the span of a century, from Nietzsche’s anti-foundationalist critique of morality and truth to Habermas’s attempt to rebuild a pragmatic-transcendentalist theory for ethical and discursive reason after the collapse of metaphysics. Readings by Nietzsche, Weber, Heidegger, Adorno, Horkheimer, and Habermas.
Note: Expected to be given in 2014–15.

[History 1324. French Social Thought]
Catalog Number: 27206
Peter E. Gordon
Half course (spring term). Hours to be arranged.
A survey of major themes and debates in modern French social theory over the span of a century, from Durkheim’s neo-Kantian theory of the social symbolic to Foucault’s conception of the historical a priori, concluding with the recent emergence of neo-liberal conceptions of both history and society. Major readings by Durkheim, Mauss, Lévi-Strauss, Canguilhem, Foucault,
Lefort, Furet, and Gauchet.

*Note: Expected to be given in 2014–15.*

[*History 1325 (formerly *History 83f). Political Theology: Conference Course]*
Catalog Number: 12099 Enrollment: Limited to 15.

*Peter E. Gordon*

*Half course (spring term). Hours to be arranged.*

This advanced research seminar for undergraduates (and graduate students by permission) addresses the interrelation between religious ideas and political theory in the modern period. Readings by Schmitt, Strauss, Barth and Kantorowicz, alongside more recent theorists such as Assmann, Taubes, Badiou, and Agamben.

*Note: Expected to be given in 2013–14.*

[History 1326. The Frankfurt School and Religion: Conference Course]
Catalog Number: 42879 Enrollment: Limited to 15.

*Peter E. Gordon*

*Half course (spring term). Hours to be arranged.*

This course examines major thinkers and themes associated with the Frankfurt School - Adorno, Horkheimer, Benjamin, and Habermas. We will focus primarily on their theoretical writings concerning the status of religion in political modernity and the significance of theological concepts for modern social theory.

*Note: Expected to be given in 2013–14. This course is open only to students of junior or senior standing, and to graduate students.*

*History 1329. Human Rights: History and Theory - (New Course)*
Catalog Number: 21141 Enrollment: Limited to 125.

*Samuel Moyn*

*Half course (spring term). W., F., 1:10 to 2:40; sections TBA. EXAM GROUP: 6, 7*

This course examines international human rights from a variety of historical and theoretical perspectives to understand their origins and their purchase on our both our moral imagination and our political life today. Applying tools from history, political theory, and international relations to concrete legal case studies, our goal is to understand the sources and logic of human rights ideas in modern and contemporary political life. No prerequisites.

*Note: Offered jointly with the Law School as 2486.*

[History 1330. Social Thought in Modern America]
Catalog Number: 8440

*James T. Kloppenberg*

*Half course (fall term). Hours to be arranged.*

An inquiry into American ideas since 1870, examining developments in political and social theory, philosophy, and literature in the context of socioeconomic change. Topics include the breakdown of Victorian idealism and laissez-faire; the emergence of social science and progressivism; conflicts over gender, race, and ethnicity; interwar cultural ferment and political reform; post-World War II theories of consensus and 1960s radicalism; and the consequences for democracy of our contemporary culture of hyper-partisanship.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[History 1345. The Human Sciences in the Modern West]
Catalog Number: 1324
Andrew Jewett
Half course (fall term). Hours to be arranged.
This course explores how the human sciences evolved from loosely organized discourses into academic disciplines in response to the sweeping transformations of the modern era. Students gain perspective on how universities such as Harvard became what they are today. Readings consist of short primary selections, from Francis Bacon and Rene Descartes in the seventeenth century to Homi Bhabha, Jean Baudrillard, Pierre Bourdieu, Alasdair MacIntyre, Richard Rorty, Steven Pinker, and Francis Fukuyama in our own time.

Note: Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[History 1350. Theories of Secularization: Conference Course]
Catalog Number: 5865 Enrollment: Limited to 15.
Peter E. Gordon
Half course (spring term). Hours to be arranged.
This advanced undergraduate course surveys various debates concerning the historical process and philosophical-political significance of secularization, especially the secularization of political norms. The course concentrates on the history of European thought since 1650, with special reference to the encounter between Western monotheistic religion and rationalist modes of criticism that first emerged with the scientific revolution. Readings from: Veyne, Febvre, Marx, Weber, Schmitt, Lôwith, Strauss, Blumenberg, and Taylor.

Note: Expected to be given in 2013–14.

*History 1390. Understanding Democracy through History
Catalog Number: 1517 Enrollment: Limited to 45.
Alexander Keyssar (Kennedy School)
Half course (spring term). M., W., 2:40–4. EXAM GROUP: 7, 8
Examines the evolution of democracies in different nations over extended periods of time, and will focus on one fundamental issue: Under what circumstances or conditions have democracies (or political rights) expanded, and under what circumstances of conditions have they contracted? Readings will include historical studies as well as comparative theoretical works.

Note: Offered jointly with the Kennedy School as DPI-703. This course may be lotteried.

Cross-listed Courses

[Economics 1776. Religion and the Rise of Capitalism]
Studies of Women, Gender, and Sexuality 1258. Friends with Benefits?

Primarily for Graduates
[History 2300. Methods in Intellectual History: Proseminar]
Catalog Number: 7779 Enrollment: Limited to 15.
Instructor to be determined
Half course (spring term). Hours to be arranged.
Introduction to advanced research in intellectual history with special reference to philosophy and political thought. Readings will include primary and secondary materials drawn from East-Asian and Euro-American traditions.
Note: Expected to be given in 2013–14.

History 2315. Censorship: Seminar
Catalog Number: 71765 Enrollment: Limited to 15.
Robert Darnton
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
A graduate seminar on the nature of censorship and the way it actually operated in Stuart England, Bourbon France, the British Raj, Communist East Germany, and regimes vulnerable to the Internet.

[History 2320hf. Foundations of Modern European Intellectual History: Seminar]
Catalog Number: 16747 Enrollment: Limited to 15.
Peter E. Gordon
Half course (throughout the year). Hours to be arranged.
This graduate seminar provides a survey of major themes and controversies in modern European intellectual history from the Enlightenment to the post-war era. The seminar is intended primarily for graduate students who are preparing for the qualifying examination. The course is offered on a yearly basis, and it meets every other week throughout the academic year. Please consult with the instructor for further details.
Note: Expected to be given in 2013–14.

*History 2321. Methods in Book History: Seminar
Catalog Number: 5169 Enrollment: Limited to 15.
Ann M. Blair and Leah Price
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Will introduce students to methods and debates in the history of the book and of reading. Students from all humanities and social science disciplines are welcome. Primarily for graduates; open to advanced undergraduates by consent of the instructors.

History 2330. Ideas in Europe in the 18th Century: Seminar
Catalog Number: 1077 Enrollment: Limited to 15.
Emma Rothschild
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
A graduate seminar which examines a number of 18th century writings (by Hume, Smith, Wollstonecraft, and Condorcet) and ideas (enlightenment, religion, empire), and explores different ways of writing about the history of ideas.

[*History 2331. Adam Smith: Philosophy and Political Economy: Seminar]
Catalog Number: 77253 Enrollment: Limited to 20.
Emma Rothschild and Amartya Sen
Half course (fall term). Hours to be arranged.
The course examines Adam Smith’s writings on philosophy, law and political economy, in historical perspective and in relation to the foundations of modern thought.
Note: Expected to be given in 2013–14.
Prerequisite: Permission of the Instructors.

[*History 2340hf (formerly *History 2340). Readings in American Intellectual History]*
Catalog Number: 8845 Enrollment: Limited to 20.
James T. Kloppenberg
Half course (throughout the year). Hours to be arranged.
This course examines classic texts in American intellectual history from 1630 to the present, both primary and secondary, and surveys recent developments in the field. It is intended for first- and second-year graduate students preparing for general exams in history and for other graduate students in fields such as American Civilization, Government, Law, Literature, Religion, and Education.
Note: Expected to be given in 2013–14.

[*History 2341hf. American Intellectual History: Seminar]*
Catalog Number: 57986 Enrollment: Limited to 20.
James T. Kloppenberg
Half course (throughout the year). Hours to be arranged.
This course is intended for graduate students who wish to supplement the reading of primary and secondary sources in American intellectual history with the preparation of a research paper.
Note: Expected to be given in 2013–14.

History 2350. Research Seminar in the History of Education: Seminar
Catalog Number: 77605
Julie A. Reuben (Education School)
Half course (fall term). M., 9–12. EXAM GROUP: 2, 3, 4
This course offers students the opportunity to conduct original research in the history of education.
Note: Offered jointly with the Graduate School of Education as S-508.

Cross-listed courses

United States History

Primarily for Undergraduates

Cross-listed Courses

Culture and Belief 52 (formerly History 1213). The American Evangelical Tradition from Jonathan Edwards to Jerry Falwell
[Ethical Reasoning 12. Political Justice and Political Trials]
*Freshman Seminar 39s. Visual Arts in Boston, 1670-1970: An Historical Introduction -
(New Course)
*History and Literature 90ag. Storied Structures: The Material and Cultural Life of the New England Home, 1600-1900
*History and Literature 90ai. The American Civil War
*History and Literature 90ak. The Vietnam War in American Culture
*History and Literature 90ap. American Prizefighting, 1801 to the Present - (New Course)
*History and Literature 90at. The Postwar American Road Narrative - (New Course)
*History and Literature 90l. Stories of Slavery and Freedom
*History and Literature 90n. Historical Representation in 19th-c. America
Jewish Studies 80. American Jews and the Television Age
United States in the World 38. Forced to be Free: Americans as Occupiers and Nation-Builders - (New Course)

For Undergraduates and Graduates

Jill M. Lepore
Half course (fall term). Hours to be arranged.
This hands-on research seminar will take you out of the classroom and into the archives. An intensive study of the political, cultural, literary, and social history of the American Revolution, with an emphasis on Boston from the Writs of Asssistance, in 1761 to the British evacuation of the city, in 1776. The class includes field trips to Boston and Cambridge historic sites, archives, museums, and graveyards.
Note: Expected to be given in 2013–14.

*History 1405 (formerly *History 74u). The American Republic: From the Revolution to Disunion: Conference Course
Catalog Number: 84704 Enrollment: Limited to 15.
Annette Gordon-Reed
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
This course will trace the development of the American legal and political system from 1776 to 1865. We will discuss the formation of state constitutions and the Federal Constitution, slavery and law, the development of American private law, the "Revolution of 1800" and the "Age of Jefferson", the mechanisms of westward expansion, the "Age of Jackson", and the coming of the Civil War.
Note: Offered jointly with the Law School as 2163.

History 1410. American Families, 1600-1900
Catalog Number: 20517
Laurel Thatcher Ulrich

Half course (spring term). Tu., Th., 10–11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13

Family forms in the United States have varied widely over the centuries. This course will consider the radical innovations of 17th century Puritans, eighteenth-century Moravians, and nineteenth-century Mormons; the role of the family in debates over slavery, immigration, and the status of American Indians; and the impact of legal, economic, and social changes on mainstream ideals and practices. Students will work with a wide variety of family records as well as public documents and will have the option of writing about their own family history.

[History 1415 (formerly *History 84d). The Nine Lives of Benjamin Franklin: Conference Course]

Catalog Number: 6296 Enrollment: Limited to 15.

Joyce E. Chaplin

Half course (fall term). Hours to be arranged.

Examines the eighteenth century through some of the many lives of Benjamin Franklin. Students analyze in depth one of these lives, or identify and explore yet another, to better comprehend Franklin and the worlds in which he lived: colonial America, British empire, independent US, books, science, popular culture, politics, war, social reform, personal improvement, and many others.

Note: Expected to be given in 2013–14.

History 1433. American Populisms: Thomas Jefferson to Rush Limbaugh

Catalog Number: 86765

Brett Flehinger

Half course (spring term). M., W., (F.), at 10, and a weekly section to be arranged. EXAM GROUP: 3

This course studies the American Populist tradition that defines the common "people" as the centerpiece of American economic and political life and thrives on opposition between the people and "elite" interests. The class focuses on the formal Populist movement and the People’s Party of the late nineteenth century, and places this history in broader context, from Jeffersonian tradition through the rise of anti-elitist and anti-government movements characterized by Rush Limbaugh, Sarah Palin, and the rise of the Tea Party.

Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

History 1434. American Public Life in the 20th Century

Catalog Number: 33407

Brett Flehinger

Half course (fall term). M., W., (F.), at 12, and a weekly section to be arranged. EXAM GROUP: 5

A course covering the major public and political events in America from the administration of Teddy Roosevelt through Ronald Reagan. Focuses on both rising national unity and power, as well as persistent racial, gender, and economic division that conflicted with this unity. Topics include: the Progressive Era, New Deal, World Wars, and Civil Rights Movement, and Watergate.
History 1445. Science and Religion in American Public Culture
Catalog Number: 99245
Andrew Jewett
Half course (fall term). M., W., at 11, and a weekly section to be arranged. EXAM GROUP: 4
This lecture course explores the multivalent interactions of science and religion in the United States, with a particular focus on the influence of democratic politics. Circling outward from the Scopes trial of 1925, it reaches back to the “pan-Protestant establishment” and the Darwinian controversies of the nineteenth century, and forward to today’s debates over abortion and bioengineering. Students read a wide range of primary sources and examine visual material. No previous coursework is required.
Note: This course, when taken for a letter grade, meets the General Education requirement for United States in the World or Culture and Belief, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

History 1450. The United States Metropolis, 1945-2000 - (New Course)
Catalog Number: 49646
Samuel Zipp (Brown University)
Half course (spring term). Tu., Th., at 1, and a weekly section to be arranged. EXAM GROUP: 15
This lecture and discussion course will provide students with an introduction to the history, politics, and culture of United States cities and suburbs from the end of World War II to the close of the twentieth century. Readings and assignments are drawn from recent work in the political, social, and cultural history of U.S. cities as well as primary sources rooted in the period under study, particularly films.

[History 1457. History of American Capitalism]
Catalog Number: 75535 Enrollment: Limited to 100.
Sven Beckert
Half course (spring term). Hours to be arranged.
Examines the development of the American economy from its beginnings to the present. Focuses on the nature of economic change during the past 400 years and the reasons for and effects of capitalist growth. Topics include Native-American economies, the industrial revolution, slavery, the rise of new business structures, labor relations, and technological change.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B. Students who have taken Historical Study B-49 may not take this course for credit.

[History 1462. History of Sexuality in Modern West]
Catalog Number: 83347 Enrollment: Limited to 45.
Nancy F. Cott
Half course (spring term). Hours to be arranged.
Focusing mainly on the United States and secondarily on Europe, this course will examine changing sexual cultures and their relation to political economy as well as to gender norms from the 17th through 20th centuries. The emergence and ascendance of the concepts of sexuality,
heterosexuality and homosexuality will be examined through intellectual and social history.

*Note:* Expected to be given in 2013–14.

**[History 1465. The United States in the World since 1900]**

Catalog Number: 4745

*Erez Manela*

*Half course (fall term). Hours to be arranged.*

A wide-ranging overview of American interactions with the world from the Spanish-American War through 9/11 and beyond. We will consider the changing patterns of international politics, the causes and implications of imperialism and decolonization, the pivotal impact of the world wars and the Cold War, the significance of cultural interactions and social movements, the challenges of globalization, the complexities of international development, and the roots of current world (dis)orders.

*Note:* Expected to be given in 2014–15. This course, when taken for a letter grade, meets the General Education requirement for The United States in the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**[History 1495 (formerly History 1672). The US in the 1960s]**

Catalog Number: 5900

*Lisa M. McGirr*

*Half course (fall term). Hours to be arranged.*

An introduction to the main developments in American society, culture, and politics during the premiere liberal decade of the 20th century. Topics include the New Frontier, the Great Society, the Vietnam war, the Civil Rights movement, the student movement, the counter-culture, and the rise of populist conservatism.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**Cross-listed Courses**

**African and African American Studies 118. The History of African Americans From the Slave Trade to the Great Migration**

**African and African American Studies 135x. Reading Du Bois - (New Course)**

**African and African American Studies 191x. African American Lives in the Law**

**Government 1074. Political Thought of the American Founding**

**Religion 1468. Religion in America: From the Coming of the Europeans to the 1870s**

[*Studies of Women, Gender, and Sexuality 1200fh. Our Mothers, Ourselves: Postwar American Feminist Thought]*

**Studies of Women, Gender, and Sexuality 1200hw. Home/Work: Women and Work in the U.S. - (New Course)**

**Studies of Women, Gender, and Sexuality 1258. Friends with Benefits?**

**Primarily for Graduates**
**History 2400. Readings in Colonial and Revolutionary America: Proseminar**

Catalog Number: 9176  
Joyce E. Chaplin  
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16  
An introduction to scholarly literature on colonial and revolutionary America. Required for History Department graduate students specializing in US history. Open to those from other fields or programs.

**[History 2402. American Food: Seminar]**  
Catalog Number: 1656 Enrollment: Limited to 15.  
Joyce E. Chaplin  
Half course (fall term). Hours to be arranged.  
From the starving time at Jamestown to present-day concerns over obesity, food has been central to the American experience. But what (if anything) is American about American food? After acquiring background skills in food history, students will do independent research on that central question.  
**Note:** Expected to be given in 2013–14.

**[History 2404. Themes in Mormon History: Seminar - (New Course)]**  
Catalog Number: 19813 Enrollment: Limited to 12.  
Laurel Thatcher Ulrich  
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17  
This seminar will explore recent scholarship on nineteenth and early twentieth century Mormonism and guide students in developing independent research projects on selected topics of their choice  
**Note:** Offered jointly with the Divinity School as 2206.

**[History 2442. Readings in the History of the U.S. in the 19th Century: Proseminar]**  
Catalog Number: 2383  
Instructor to be determined  
Half course (fall term). Hours to be arranged.  
The second in the sequence of three proseminars required of all graduate students in American history and open to graduate students in other history fields and other departments as space permits.  
**Note:** Expected to be given in 2013–14.

**[History 2443. Slavery, Capitalism, and Imperialism in the 19th century United States: Seminar]**  
Catalog Number: 8558  
Walter Johnson  
Half course (spring term). Hours to be arranged.  
Will illuminate the imperial dimensions of the history of the nineteenth-century US.  
**Note:** Expected to be given in 2013–14.

**[History 2450. The History of Education in the United States: Seminar]**  
Catalog Number: 91462
Julie A. Reuben (Education School)
Half course (fall term). Hours to be arranged.
This course examines major issues in the development of schooling from the Colonial period to the present.
Note: Expected to be given in 2013–14. Offered jointly with the Graduate School of Education as A-418.

[History 2457. History of Capitalism: Seminar]
Catalog Number: 86286
Sven Beckert
Half course (fall term). Hours to be arranged.
This graduate research seminar will focus on the global history of capitalism since 1750. After an introduction to some of the central debates in the economic, social and political history of capitalism, students will be guided to write a major research paper.
Note: Expected to be given in 2013–14.

[*History 2461. The US in the 20th Century: Seminar]
Catalog Number: 1270 Enrollment: Limited to 12.
Lizabeth Cohen
Half course (fall term). Hours to be arranged.
Research on topics in 20th-century US history.
Note: Expected to be given in 2013–14.
Prerequisite: Permission of instructor

[History 2462. Readings in the U.S. in the 20th Century: Proseminar]
Catalog Number: 2931
Instructor to be determined
Half course (spring term). Hours to be arranged.
Readings in recent monographs as well as older historiography, covering a wide range of 20th-century topics. This proseminar is required of all History graduate students focusing on the United States.
Note: Expected to be given in 2013–14.

History 2463. Graduate Readings in 20th-Century African-American History: Seminar
Catalog Number: 9004 Enrollment: Limited to 10.
Evelyn Brooks Higginbotham
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
In this graduate seminar we will read books and articles on topics that reflect the diverse experiences and ideologies of African Americans in the twentieth century. We will discuss and analyze differing historical interpretations and methodologies. We will also explore a variety of historical writings, e.g., biography, intellectual history, race and gender studies, labor history, transnational history, etc. Students are required to write a short report on a recommended reading each week, in addition to being prepared to discuss the required reading. A historiographic paper will be due at the end of the term.
*History 2467hf. Everyday Life: The Textures and Politics of the Ordinary, Persistent, and Repeated: Seminar - (New Course)
Catalog Number: 57019
Robin M. Bernstein and Samuel Zipp
Half course (throughout the year). Th., 4–6. EXAM GROUP: 18
Year-long research seminar in conjunction with Warren Center Postdoctoral Workshop. Participants will explore the substantial stakes in the ordinary, persistent, and repeated activities regularly engaged in, particularly how small-scale experiences connect to broad political concerns. 
Prerequisite: Permission of instructor

*History 2470hf. Workshop in 20th-Century US History
Catalog Number: 0565
Lizabeth Cohen
Half course (throughout the year). Hours to be arranged.
For dissertation writers only.
Prerequisite: Permission of the instructor

[History 2480hf. The Political Economy of Modern Capitalism: Seminar]
Catalog Number: 3719
Sven Beckert and Christine Desan (Law School)
Half course (throughout the year). Spring: M., 4–6. EXAM GROUP: Spring: 9
A year-long research and reading course on the history of capitalism during the past 300 years. Note: Expected to be given in 2013–14. Students wishing to take this course in 2012-2013 can do so by taking Law 2168.

[History 2495. Twentieth-Century Politics and Social Movements: Seminar]
Catalog Number: 46932
Lisa M. McGirr
Half course (fall term). Hours to be arranged.
Seminar culminating in the production of an article length essay based on primary research. Students will conduct research into significant topics at the intersection of the state and civil society in the twentieth-century United States. Note: Expected to be given in 2014–15.

Cross-listed Courses

[African and African American Studies 218. Topics in African American History]
*American Civilization 200 (formerly *American Civilization 370). Major Works in the History of American Civilization
*American Civilization 201 (formerly *American Civilization 371). Themes in the History of American Civilization
*Economics 2339. Research in Economic History

Latin American History
Primarily for Undergraduates

Cross-listed Courses

*History and Literature 90aq. Nunca Mas: Dictatorships, Torture and Terror in Latin America - (New Course)

Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!
Societies of the World 34 (formerly Foreign Cultures 46). The Caribbean: Globalization, Socio-Economic Development & Cultural Adaptation

For Undergraduates and Graduates

History 1511. Latin America and the United States - (New Course)
Catalog Number: 22264
Kirsten Weld
Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13
Surveys the complex, mutually constitutive, and often thorny relationship - characterized by suspicion and antagonism, but also by fascination and desire - between the United States and the diverse republics south of the Rio Grande. Examines public policy, US expansionism and empire, popular culture and consumption, competing economic development models, migration, tourism, the Cold War, sovereignty, dissent, and contrasting visions of democratic citizenship. Note: This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

History 1512. Dirty Wars, Peace Processes, and the Politics of History in Latin America: Conference Course - (New Course)
Catalog Number: 88893 Enrollment: Limited to 15.
Kirsten A. Weld
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
Latin America’s "dirty wars" generated intense struggles over historical memory. Course focuses on Chile, Argentina, El Salvador, and Guatemala, and comparatively examines how societies reckon with bloody recent pasts that are anything but settled. Looks at both these countries’ dictatorships and their fraught peace processes (including truth commissions, transitional justice, artistic representations, human rights activism, international law, foreign involvement, backlash) in order to probe the stakes and politics of historical interpretation.

History 1513. History of Modern Latin America - (New Course)
Catalog Number: 52478
Kirsten A. Weld
Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
This course surveys Latin America from its 19th-century independence movements through the
present day. How did the powerful legacies of European colonialism, and the neocolonial economic order that emerged to replace it, shape the Americas’ new nations? Themes include nationalism and identity, revolution and counterrevolution, populism, state formation, race and ethnicity, gender and sexuality, social movements, the role of foreign powers, inequality and social class, dictatorship, democratization, and human rights.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**Cross-listed Courses**

*Asian, African, and Middle Eastern History*

**Primarily for Undergraduates**

**Cross-listed Courses**

*African and African American Studies 11. Introduction to African Studies*
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]

*Freshman Seminar 35z. The Modern Political History of the Arab World: From Kings and Presidents for Life to the Arab Spring - *(New Course)*

*Freshman Seminar 39e. Rome and China - *(New Course)*

[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]

[Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World]

[Societies of the World 22. Asia in the Making of the Modern World]


[Societies of the World 36 (formerly Historical Study A-16). Modern India and South Asia]

[Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt]

[Societies of the World 43 (formerly Historical Study B-67). Japan’s Samurai Revolution]

[Societies of the World 45 (formerly Chinese History 118). Beyond the Great Wall: China and its Nomadic Other]

**For Undergraduates and Graduates**

*History 1619. Premodern Vietnam*

Catalog Number: 4581

*Hue-Tam Ho Tai*

*Half course (spring term). M., W., at 11. EXAM GROUP: 4*

Vietnamese history from antiquity to the founding of the Nguyen dynasty in 1802 with emphasis on the period following independence from China in the 10th century. Topics include the Sinicization of Vietnam and the sources of Vietnamese national identity; tensions between
aristocratic and bureaucratic rule; territorial expansion and national division; first contacts with
the West; the changing status of women.

**History 1620. Modern Vietnam**
Catalog Number: 8192
_Hue-Tam Ho Tai_
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Survey of Vietnamese history from 1802 to the present. Covers the period of unified rule under
the Nguyen dynasty, French colonial conquest, the struggle for independence, the Vietnam War,
and the recent unification under Communism. Major topics include the relationship between the
state, the village, and the individual; the transformation of Vietnamese society, culture, and
politics under French rule; the rise of nationalism and Communism; the causes and consequences
of the Vietnam War.
Note: This course, when taken for a letter grade, meets the Core area requirement for Foreign
Cultures.

[**History 1623. 20th-Century Japan**]
Catalog Number: 8696
_Andrew Gordon_
Half course (fall term). Hours to be arranged.
Explores Japan’s emergence as a world power and the Japanese experience of modernity.
Examines politics, social movements, and culture of the imperial era; the experience of World
War II and postwar occupation; the “economic miracle” and postwar political economy; social
and cultural transformation. Concludes by considering historical context for issues of the present
day ranging from economic crisis to tensions with Japan’s Asian neighbors.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the
Core area requirement for Historical Study A.

**History 1625. Japan and World War II in Asia - (New Course)**
Catalog Number: 21932
_Jeremy Avrum Yellen_
Half course (spring term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
World War II was many wars. Fought on multiple fronts on three continents, the war witnessed a
complex mesh of ideologies and war aims. It wrought unparalleled destruction, targeted civilians
to an unprecedented degree, and led to the fall of global empires. This course focuses on Japan’s
World War II in the Asia-Pacific. It explores the war’s origins, impact on people’s lives across
the region, and postwar legacies in Japan and throughout Asia.

**History 1628. Modern China - (New Course)**
Catalog Number: 11666
_Micah S. Muscolino (Georgetown University)_
Half course (fall term). Tu., Th., 1–2:30, and a weekly section to be arranged. EXAM GROUP: 15, 16
This class focuses on experiences of ordinary people in China who lived through the tumultuous
changes of the nineteenth and twentieth centuries. Drawing on personal narratives, historical
documents, and films (along with a textbook) students examine how individual and family lives connected with broader processes of change in modern China. Readings and discussions focus on how major political events impacted daily lives of men and women in China, and how their decisions and actions contributed to large-scale social and cultural transformations.

**History 1629. China and the Environment: Conference Course - (New Course)**
Catalog Number: 14917 Enrollment: Limited to 15.
*Micah S. Muscolino (Georgetown University)*
*Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18*

To gain a better understanding of China’s current environmental dilemmas, this class surveys the history of interactions between people and nature in China over the last four millennia. Topics include views of the environment in Chinese philosophy and religion, China’s agrarian landscapes, the politics of water control, and transformations on China’s frontiers. The latter part of the course turns to twentieth-century China, exploring ecological dimensions of modern state building, revolutionary mobilization, economic development, and globalization. The class tackles challenging, but topical questions that have a major bearing on global environmental concerns.

**[History 1700. The History of Sub-Saharan Africa to 1860]**
Catalog Number: 5936
*Emmanuel K. Akyeampong*
*Half course (fall term). Hours to be arranged.*

Survey of sub-Saharan Africa to 1860, with attention to the range of methodologies used in writing early African history, including oral history, archaeology, and anthropology. Will address themes of the impact of climate change on migration and settlement, trade and commerce, state formation, slavery, and the impact of Islam and Christianity on the continent. Will provide a methodological and historiographical framework in which more specific historical processes and events may be placed and understood.

*Note:* Expected to be given in 2014–15. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**History 1701. West Africa from 1800 to the Present**
Catalog Number: 4650
*Emmanuel K. Akyeampong*
*Half course (fall term). Tu., Th., at 11, and a weekly section to be arranged. EXAM GROUP: 13*

The course explores the internal dynamics of West African states from 1800, and West Africa’s relations with the wider world. Innovations in science, technology and finance made the 19th century an era of social and economic opportunity and of political experimentation; a phase curtailed by European imperialism. The course examines African perspectives on colonialism, the two world wars, nationalism, and the transfer of political power. We will review post-colonial political economies and the search for workable political and economic models.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

**[History 1702 (formerly History 1923). Violence, Substances and Mental Illness: African Perspectives: Conference Course]**
Catalog Number: 9704 Enrollment: Limited to 15.

Emmanuel K. Akyeampong and Arthur Kleinman
Half course (spring term). Hours to be arranged.

An introduction to African perspectives on mental illness, exploring the development and practice of psychiatry as a medical field in Africa, examining the grey areas within psychiatric knowledge, and engaging the ongoing debates about the interface between race, culture and psychiatry. Will review African therapeutic systems; witchcraft, causation and mental health; substance abuse; violence and mental illness; and more recent links between HIV/AIDS, loss and depression.

Note: Expected to be given in 2013–14.

[History 1703. Africa and the Wider World since 1800: Conference Course]
Catalog Number: 80671
Emmanuel K. Akyeampong
Half course (spring term). Hours to be arranged.

The "African Story" is well known with diverse opinions today on Africa’s persistent underdevelopment. Historical outcomes are less certain for historical actors going through periods of transformation. This course examines momentous events in African and world history from African perspectives, privileging primary sources and African scholarship. What were African perspectives on European partition of Africa; the World Wars and the Jewish Holocaust; independence, neo-colonialism and the Cold War; Africa’s role in global drug trafficking?

Note: Expected to be given in 2013–14.

[History 1704 (formerly Societies of the World 39). Slavery and Slave Trade in Africa and the Americas]
Catalog Number: 3834
Emmanuel K. Akyeampong
Half course (spring term). Hours to be arranged.

This course begins with the question of terminological precision and the definition of slavery and other forms of servile labor—especially in Africa. The course then examines the institution of slavery in Africa and the Americas within this wider historical context, analyzing the political economies and ideologies that underpin slavery and the crucial role of slave trade in reproducing slave communities that were barely able to reproduce themselves naturally. The course explores the impact of slavery on political, economic, social, and cultural life in Africa and the Americas and ends with a discussion of the legacy of slavery and the global nature of the African diaspora.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[History 1849. Australia’s Black History] - (New Course)
Catalog Number: 78327

To be determined

Half course (fall term). Hours to be arranged.

This course surveys the history of the encounter between settlers and indigenous people in Australia from the beginning of British colonization in the late eighteenth century to recent
times. Topics include early cross-cultural relations; conflict on frontiers; treaty-making; the imposition of British law; indigenous dispossession, depopulation and removal; religious change and reserves; labor relations; the growth of racial consciousness; government policies and practices; indigenous responses to oppression and marginalization; and political movements for indigenous rights.

Note: Expected to be given in 2013–14.

**History 1877a (formerly History 1877). History of the Near East, 600-1055**

Catalog Number: 1770
Roy Mottahedeh

*Half course (fall term). Tu., Th., at 1. EXAM GROUP: 15*

A survey of the history of the Near East and North Africa from the rise of Islam in the 7th century to the Turkish ascendance in the mid-11th century. Includes Muhammad and his community, Arab conquests, Umayyads and Abbasids, sectarian movements, minority communities, government and religious institutions, and relations with Byzantium and the Latin West.

Note: Offered jointly with the Divinity School as 3594.

**[History 1877b (formerly *History 78b). History of the Near East, 1055-1500: Conference Course]**

Catalog Number: 3026 Enrollment: Limited to 20.
Roy Mottahedeh

*Half course (fall term). Hours to be arranged.*

Surveys history of the Near East from the coming of the steppe peoples to the Ottoman conquest of Egypt. Includes Seljuks, Crusades, Mongols, and the fall of the Abbasid caliphate, Mamluks, the development of Mediterranean and Indian Ocean trade, and the Timurids and their successors.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3595.

*Prerequisite: History 1877a helpful, but not required.*

**[History 1878a. Ottoman State and Society I (1300–1550)]**

Catalog Number: 5471
Cemal Kafadar

*Half course (fall term). Hours to be arranged.*

Surveys the emergence of the Ottoman state from a frontier principality into a world empire in its sociopolitical and cultural contexts. Topics include pre-Ottoman Anatolia; frontier society; methods of conquest; centralization of power; classical institutions of the land regime and of the central administration; urbanization; religion and literature. Relations with Byzantium, other Islamic states, and Europe are examined.

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core requirement for Historical Study B.

**[History 1878b. Ottoman State and Society II (1550-1920)]**

Catalog Number: 6470
Cemal Kafadar

*Half course (spring term). Hours to be arranged.*
Surveys the transformations of the Ottoman order in the Middle East and southeastern Europe in the early modern era and in the long nineteenth century until the demise of the state. Topics include changes in the conduct of state; social and religious movements; the impact of the new world economy and new trade routes; relations with Europe; emergence of nationalism; the ’Eastern Question.’ Ethnic structure, rural society, urban popular culture, guilds, gender and family life are also examined. The importance of this era for understanding today’s Middle East is stressed.

Note: Expected to be given in 2014–15.

History 1888. The Modern Persian Gulf Region: Politics, Economy and Society - (New Course)
Catalog Number: 18641
Arbella Herutha Bet-Shlimon
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
An introduction to the histories of the Arabian Peninsula states, Iraq, Iran, and their linkages since the nineteenth century. Topics to be covered include the political economy of oil, governmental structures and political transitions, identity formation, foreign influence and neoimperialism, the characteristics of Gulf port cities, and relations with the broader Middle East and Indian Ocean.

Cross-listed Courses

Arabic 160r. Readings in Arabic Historians, Geographers, and Biographers
Chinese History 113. Society and Culture of Late Imperial China
History of Science 180. Science, Technology, and Society in Modern East Asia
Islamic Civilizations 145. Introduction to Islamic Philosophy and Theology
[Japanese History 115. Religion and Society in Edo and Meiji Japan]
[Japanese History 120. Religion and Society in Twentieth-Century Japan]
Japanese History 126. Shinto: Conference Course
Japanese History 150. Early Modern Japan
Korean History 111. Traditional Korea
[Japanese History 115. Korean History Through Film] - (New Course)
[Korean History 118. Social History of Premodern Korea]
[Korean History 130. The Recurring Past--Early Korea and Northeast Asia as History and Identity]
[Persian 150r. Readings in Persian Historians, Geographers and Biographers]
The Modern Middle East 100 (formerly Near Eastern Civilizations 100). Approaches to Middle Eastern Studies
The Modern Middle East 115. The Arab-Zionist conflict, 1882-1948 - (New Course)
The Modern Middle East 162 (formerly Arabic 162). Introduction to the Modern Arab World I
The Modern Middle East 170 (formerly Arabic 170). Introduction to the Arab World II: Politics, Religion, and Culture from World War I to Present

Primarily for Graduates
History 2620. Visible and Invisible Hands in China: State and Business since 1800: Seminar - (New Course)
Catalog Number: 84147
Elisabeth Koll (Business School)
Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17
This course examines the complex relationship between the Chinese state, entrepreneurs, firms, and markets in the evolution of China’s modern economy and society from the 19th to the 21st century. Readings address important debates in the fields of Chinese business, economic, and social history but also include comparative perspectives.
Note: Offered jointly with Business School as 1671.

History 2629. New Directions in the History of Modern China: Seminar - (New Course)
Catalog Number: 28685
Micah S. Muscolino (Georgetown University)
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
This seminar introduces graduate students to the most exciting research trends in the history of modern China (ca. 1850-1990). Some of the topics covered include gender and sexuality, frontiers and ethnicity, health and medicine, popular culture, and environmental history, but will be modified based on students’ research interests. The first section of the course will cover sources related to these topics; the latter part of the course will be devoted to individual research projects.

*History 2651. Japanese History: Seminar
Catalog Number: 5146 Enrollment: Limited to 15.
Andrew Gordon
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
Students write research papers on topics of their own choosing drawing on sources in Japanese, and other languages as appropriate.
Prerequisite: Reading knowledge of Japanese.

History 2653. Historiography of Modern Japan: Proseminar
Catalog Number: 4442
Andrew Gordon
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
A critical introduction to the historiography of modern Japan, with emphasis on English-language scholarship.

History 2692. Colonial and Post-Colonial Histories of South Asia: Seminar
Catalog Number: 8502
Sugata Bose
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Analyzes trends and debates in historical research and writing on colonial and post-colonial South Asia.

History 2708. Sources, Methodology, and Themes in African History: Seminar
Catalog Number: 5861 Enrollment: Limited to 12.
Emmanuel K. Akyeampong
Half course (fall term), W., 4–6. EXAM GROUP: 9
Seminar to equip graduate students with the necessary tools for archival research and fieldwork, as well as to introduce them to recent approaches in the historiography.
Prerequisite: A graduate field on Africa.

[History 2709. Themes in Modern Sub-Saharan African History: Proseminar]
Catalog Number: 5840 Enrollment: Limited to 14.
Caroline M. Elkins
Half course (spring term), Hours to be arranged.
An in-depth study of the major themes in sub-Saharan African history from the mid-19th century to the present, including the scholarship and debates on the changing relationship between Africa and the West.
Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

History 2805. Gender and Sexuality: Comparative Historical Studies of Islamic Middle East, North Africa, South, and East Asia: Seminar
Catalog Number: 8070
Afsaneh Najmabadi
Half course (spring term), W., 2–4. EXAM GROUP: 7, 8
Informed by theories of gender and sexuality, this seminar investigates how historically notions of desire, body, sex, masculinity, femininity, gender and sexual subjectivities have formed and reformed in Islamicate cultures of the Middle East, North Africa, and South and East Asia.

[History 2884. Topics in Ottoman Social and Cultural History: Seminar]
Catalog Number: 3762
Cemal Kafadar
Half course (spring term), Hours to be arranged.
Topic to be announced.
Note: Expected to be given in 2013–14.
Prerequisite: Reading knowledge of Turkish.

[History 2885. Introduction to Archival Research in Ottoman History: Proseminar]
Catalog Number: 3274
Cemal Kafadar
Half course (spring term), Hours to be arranged.
A survey of archival collections related to Ottoman history. Introduction to the archives of the central government, pious endowments, provincial administrations, and court records.
Note: Expected to be given in 2014–15.
Prerequisite: Reading knowledge of Turkish.

[History 2886. Topics in Islamic History: Seminar]
Catalog Number: 3470
Roy Mottahedeh
Half course (fall term), W., 2–4. EXAM GROUP: 7, 8
Topic to be announced.
*Note:* Expected to be given in 2013–14.

**Cross-listed Courses**

- [Anthropology 2092. Early China: Archaeology and Texts]
- [Chinese History 200r (formerly Chinese History 200). Computational Methods for Historical Analysis]
- [Chinese History 224. Introduction to T’ang and Sung Historical Sources]
- **Chinese History 228. Introduction to Neo-Confucianism**
- **Chinese History 232r (formerly Chinese History 232). Topics in Han History: Seminar**
- [Chinese History 253. Topics in Late Imperial History]
- [Chinese History 255. Popular Religion in Late Imperial China: Historiography]
- **Chinese History 270a (formerly History 2624a). Research Methods in Late Imperial Chinese History I: Seminar**
- [Chinese History 270b (formerly Chinese History 264b). Research Methods in Late Imperial Chinese History II: Seminar]
- [Japanese History 260r. Topics in Japanese Cultural History]
- [Japanese History 265. The Muromachi Period: Culture and Context]
- **Japanese History 270. Early Modern Japanese History: Proseminar**
- [*Korean 300. Reading and Research*]
- [Korean History 230r. Readings in Premodern Korean History]
- [Korean History 231ar. Documents and Research Methods for the Study of Premodern Korea I: Seminar]
- [Korean History 231b. Documents and Research Methods for the Study of Premodern Korea II: Seminar]
- **Korean History 253r (formerly Korean History 253r). Modern Korean History: Proseminar**
- [*Korean History 255r. Modern Korean History: Seminar*]
- [Korean History 260r (formerly Korean History 260r). Readings in Modern Korean History I]
- [Korean History 261. Readings in Modern Korean History II]
- [Korean History 270. Readings in Early Korean and Northeast Asian History: Seminar]
- **The Modern Middle East 215. The Arab-Israeli War of 1948 - (New Course)**

**International History**

*Primarily for Undergraduates*

**Cross-listed Courses**

- [*History and Literature 90ak. The Vietnam War in American Culture*]
- [*History and Literature 90as. Black-Blanc-Beur: Colonial Subjects and Popular Culture in the Francophone World - (New Course)*]
*History and Literature 90l. Stories of Slavery and Freedom
Societies of the World 14 (formerly Historical Study A-88). The British Empire
[Societies of the World 19. Western Ascendancy: The Mainsprings of Global Power from 1600 to the Present]
Societies of the World 42. The World Wars in Global Context, 1905-1950
United States in the World 38. Forced to be Free: Americans as Occupiers and Nation-Builders - (New Course)

For Undergraduates and Graduates

*History 1911. Pacific History: Conference Course - (New Course)
Catalog Number: 72126 Enrollment: Limited to 15.
David R. Armitage
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
The Pacific Ocean covers a third of the Earth’s surface and one-third of humanity lives on its shores and islands, from Russia to New Zealand and from Southeast Asia to South America. This seminar introduces students to oceanic and global history via works in Pacific history by scholars of the Pacific Islands, Asia, Australasia, Europe, and the Americas. Themes covered include cultural encounters, exploration, migration, history of science, geopolitics, and economic history. Note: Students can count the course towards the fulfillment of an Ethnic Studies Secondary Field.

History 1920. A Global History of Modern Times
Catalog Number: 1925
Charles S. Maier
Half course (spring term). M., W., (F.), at 11, and a weekly section to be arranged. EXAM GROUP: 4
A historical survey of world societies since roughly the 17th century. Covers transnational forces such as demographic change and migration, religious revivals, rural stratification, industrial development, and upheavals in racial and gender relationships; also comparative political transformation within empires and states, including the impact of the great revolutions, imperialism and war, trade and investment, and cultural diffusion. Note: This course, when taken for a letter grade, meets the General Education requirement for Societies of the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

History 1921. International Financial History, 1700 to the Present
Catalog Number: 9661
Niall Ferguson
Half course (fall term). Tu., Th., at 10, and a weekly section to be arranged. EXAM GROUP: 12
An introduction to modern financial history from the first stock market bubbles to the most recent. Topics include money and banking, public debt and bond markets, corporations and stock markets, investment banking, cross-border capital flows, private insurance and welfare systems, mortgages, consumer credit, privatization, emerging markets, derivatives and hedge funds.
Special attention will be paid to the role of financial institutions and financial crises in economic and political development.

**History 1940. Science and the Global Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)**
Catalog Number: 77077  
*Michael McCormick and Noreen Tuross*  
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
Examines recent and ongoing discoveries that show how the natural sciences are revolutionizing understanding of the human past across temporal and geographic boundaries. Topics include how archaeology, history and science illuminate and are illuminated by Jomon Pottery, ancient and medieval coins, silk, climate change, and genomics. Mixes classic classroom, seminar-style teaching with classes held as field-trips to New England museums, landscapes and laboratories.

Catalog Number: 3447  
*Hue-Tam Ho Tai and Brett Flehinger*  
*Half course (fall term). Hours to be arranged.*
Examines modern conflicts in Vietnam and their implications for the US from 1945–75, from both Vietnamese and American perspectives. Seeks to provide an understanding of the complexity of the war and the ethical dilemmas it raised by examining issues ranging from the power-politics assumptions of decision makers to the personal experiences of those caught in the war. Covers both background and consequences of the war, but the main focus is on the 30-year period during which the fortunes of America and Vietnam became intertwined.  
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

**[*History 1964 (formerly *History 89e). International History: Empires and State systems, War, Peace and International Organizations: Conference Course*]**
Catalog Number: 7774 Enrollment: Limited to 18.  
*Charles S. Maier*  
*Half course (fall term). Hours to be arranged.*
A comparative approach to the history of international society, including sources of conflict and efforts at peacemaking, imperial and hegemonic regimes, the protection of minorities and human rights and enforcement of transnational norms. Readings will include theoretical as well as historical texts.  
*Note:* Expected to be given in 2013–14. History 1964 and 1965 are designed particularly for advanced undergraduates in the international history track of the concentration and graduate students preparing a general examination field in the history of international relations. Seminar credit can be earned by completion of an appropriate research paper and presentation to graduate members of the class.

**[*History 1965 (formerly *History 89f). International History: States, Markets, and the Global Economy: Conference Course*]**
Catalog Number: 7148 Enrollment: Limited to 25.  
*Niall Ferguson and Charles S. Maier*
Half course (fall term). Hours to be arranged.
International economic history and political economy, including strategies of economic
development, international trade, migration, finance and monetary relations, based on both
theoretical works and specific case studies, and focusing on the period from around 1700 to the
present.
Note: Expected to be given in 2013–14. History 1964 and 1965 are designed particularly for
advanced undergraduates in the international history track of the concentration and graduate
students preparing a general examination field in the history of international relations.

[History 1967. An Introduction to the History of Economic Thought]
Catalog Number: 64646
Emma Rothschild
Half course (fall term). Hours to be arranged.
The course provides an introduction to the history of economic thought, from Aristotle to Adam
Smith, Karl Marx and Paul Samuelson; and to economic concepts in historical perspective, from
the state and the market to natural resources and financial crises.
Note: Expected to be given in 2013–14.

Catalog Number: 59002 Enrollment: Limited to 15.
Sugata Bose and Emma Rothschild
Half course (spring term). Hours to be arranged.
Explores the history of international organizations, including programs concerned with economic
crises, economic development, security, and environment. Taught in conjunction with the
development of a new web-based curriculum on United Nations history.
Note: Expected to be given in 2013–14.

[History 1970. Cold War Summits: Conference Course]
Catalog Number: 97663 Enrollment: Limited to 15.
Serhii Plokhii
Half course (spring term). Hours to be arranged.
This course introduces students to major topics in Cold War history by looking at meetings
between leaders of the two Cold War superpowers, the United States and the Soviet Union. It
explores the role that summits, including the meetings between Truman, Churchill and Stalin at
Potsdam in 1945, Kennedy and Khrushchev at Vienna in 1961, and Reagan and Gorbachev in
Geneva in 1985, had on the origins and the outcome of the Cold War.
Note: Expected to be given in 2013–14.

History 1989. New World Orders? From the Cold War to Contemporary International
Relations - (New Course)
Catalog Number: 83056
Mary Elise Sarotte
Half course (spring term). M., W., (F.), at 12. EXAM GROUP: 5
The US and major European states, including Russia and the Soviet Union, have tried to instill
order upon the chaotic transatlantic and international relations of the twentieth and twenty-first
centuries. This course examines their attempts to institute "new world orders" as the global Cold
War unfolded, European empires gave way to European integration, and technology reshaped politics. It also explores the legacy of these events for international relations in the 1990s and the twenty-first century.

Cross-listed Courses

Primarily for Graduates

**History 2906. International History: Seminar**  
Catalog Number: 0453 Enrollment: Limited to 12.  
Erez Manela  
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8  
This course explores new approaches to the international history of the twentieth century. We probe problems of scope, theme, narrative strategy, research method, and sources, among others.

**History 2911. Theories of International Relations: Seminar**  
Catalog Number: 6430  
David R. Armitage  
Half course (spring term). M., 1–3. EXAM GROUP: 6, 7  
An historical introduction to theories of war and peace, sovereignty, diplomacy, colonialism, international law, and international relations since the fifteenth century. Readings include primary and secondary sources.  
*Note:* Open to undergraduates with the permission of the Instructor.

[*History 2921. Western Ascendancy: Historiography and Pedagogy: Seminar*]  
Catalog Number: 89802 Enrollment: Limited to 15.  
Niall Ferguson  
Half course (fall term). Hours to be arranged.  
The purpose of this graduate seminar is to get Teaching Fellows and other graduates to engage with the historiographical and pedagogical challenges of the General Education course, Societies of the World 19: Western Ascendancy. Courses in Western Civilization are nowadays widely seen as outmoded and excessively Eurocentric. The aim of SW 19 is to address questions of global economic and political divergence in a fresh way, taking advantage of more recent literature on economic history, for example.  
*Note:* Expected to be given in 2013–14.

**History 2926. Empires Compared: Proseminar - (New Course)**  
Catalog Number: 62429  
Maya Jasanoff and Mary D. Lewis  
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16  
What do empires have in common, and what makes each distinct? Course undertakes thematic approach to imperial history via culture, economics, governance, and more. Open to students across subfields; emphasis on teaching and exam preparation.

[History 2951. The Environmental Turn in History: Seminar]  
Catalog Number: 20985 Enrollment: Limited to 12.
Ian J. Miller
Half course (spring term). Hours to be arranged.
A critical exploration of history’s "environmental turn." This course tracks the movement of environmental themes to the center of the discipline and the emergence of environmental history as an important new subfield. Readings will range from classics to cutting-edge new work.
Note: Expected to be given in 2014–15.

Cross-listed Courses

*American Civilization 200 (formerly *American Civilization 370). Major Works in the History of American Civilization
[Economics 2328. The Emergence of Modern Economic Growth: A Comparative and Historical Analysis]
Economics 2330. History and Human Capital

Courses in Reading and Research

Methodology

[*History 2965 (formerly *History 2481). The Scope of History: Seminar]
Catalog Number: 4804 Enrollment: Limited to 15.
Mary D. Lewis
Half course (spring term). Hours to be arranged.
Explores the historical method by considering the wide array of "levels" of analysis or foci that historians adopt, from local and national to transnational, comparative and global; considers the relationship between scope and problematic.
Note: Expected to be given in 2013–14.
Prerequisite: Graduate standing or permission of instructor.

[*History 2968 (formerly *History 2915). History and Economics: Proseminar]
Catalog Number: 1557
Emma Rothschild
Half course (fall term). Hours to be arranged.
Examines approaches to the history of economic thought and economic history by the exploration of particular topics, including the political economy of empire, information, and financial crisis.
Note: Expected to be given in 2013–14.

*History 3900. Writing History: Approaches and Practices
Catalog Number: 1358
Walter Johnson
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Required of and limited to first-year doctoral students in History, HMES, and those students in EALC who choose the History specialization.
Prerequisite: First year graduate students only.
Cross-listed Courses

Teaching Practicum

*History 3920hf. Colloquium on Teaching Practices
Catalog Number: 5222
Joyce E. Chaplin 1058
Half course (throughout the year). M., 3–5. EXAM GROUP: 8, 9
Required of and open only to all third-year history department graduate students.

Directed Reading and Research

*History 3000. Direction of Doctoral Dissertations
Catalog Number: 4630

*History 3010. Reading and Research
Catalog Number: 3424
History and Literature

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Members of the Committee on Degrees in History and Literature

Jill M. Lepore, David Woods Kemper ’41 Professor of American History, Harvard College Professor (Chair)
David J. Alworth, Assistant Professor of English and of History and Literature
David R. Armitage, Lloyd C. Blankfein Professor of History
Steven Biel, Senior Lecturer on History and Literature
Ann M. Blair, Henry Charles Lea Professor of History, Harvard College Professor
Janet Browne, Aramont Professor of the History of Science, Harvard College Professor (on leave
2012-13)
Glenda R. Carpio, Professor of English and of African and African American Studies
Amanda Claybaugh, Professor of English
Daniel G. Donoghue, John P. Marquand Professor of English
James Engell, Gurney Professor of English Literature and Professor of Comparative Literature
Jeanne A. Follansbee, Senior Lecturer on History and Literature
Virginie Greene, Professor of Romance Languages and Literatures, Harvard College Professor
Maya Jasanoff, Professor of History
Walter Johnson, Winthrop Professor of History and Professor of African and African American Studies
James T. Kloppenberg, Charles Warren Professor of American History (on leave 2012-13)
Louis Menand, Anne T. and Robert M. Bass Professor of English (on leave fall term)
Leah Price, Professor of English, Harvard College Professor
Jennifer L. Roberts, Professor of History of Art and Architecture
Oliver Simons, Associate Professor of Germanic Languages and Literatures (on leave fall term)
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of African and African American Studies
John Stauffer, Professor of English and of African and African American Studies
William Mills Todd III, Harry Tuchman Levin Professor of Literature and Professor of Comparative Literature
Kirsten A. Weld, Assistant Professor of History

Other Faculty Offering Instruction in the History and Literature Program

Peter Becker, Lecturer on History and Literature, Preceptor in Expository Writing
Eoin Francis Cannon, Lecturer on History and Literature
Sarah Anne Carter, Lecturer on History and Literature
Anna C. Deeny, Lecturer on History and Literature
Rachel A. Gillett, Lecturer on History and Literature
Sean J. Gilsdorf, Lecturer on History and Literature
Tamara Griggs, Lecturer on History and Literature
Timothy P. McCarthy, Lecturer on History and Literature
Megan K. Nelson, Lecturer on History and Literature
Juliet Clare Wagner, Lecturer on History and Literature

Undergraduate Seminars

These seminars exploring the interdisciplinary study of History and Literature are restricted to undergraduates and have enrollments limited to 15. There are no prerequisites, and non-concentrators are welcome. Preference is given to History and Literature concentrators if space is limited.

*History and Literature 90ag. Storied Structures: The Material and Cultural Life of the New England Home, 1600-1900
Catalog Number: 15956 Enrollment: Limited to 15.
Sarah Anne Carter
Half course (fall term). W., 1–3.
What, where, and how is home? With a focus on New England, Storied Structures will consider how conceptions of home changed from the seventeenth century through the nineteenth century. How does one acquire or create a home? What makes a house a home? Through the study of extant house museums and literary texts student will ask: Is home a place or an idea? Is it a structure or a story? What’s the difference?

*History and Literature 90ai. The American Civil War
Catalog Number: 31063 Enrollment: Limited to 15.
Megan K. Nelson
Half course (fall term). Th., 1–3.
This course examines the American Civil War through the experiences of the Americans who fought its battles and bore its consequences. We will begin with the "broad sweep"--via Lou Masur’s The Civil War: A Concise History. Subsequent weeks will focus on selected battles and campaigns, major socio-political developments (secession and emancipation), and literary depictions of the conflict. We will conclude with a study of Civil War memory making through museums, reenactments, and sesquicentennial celebrations.

*History and Literature 90aj. America Through European Eyes - (New Course)
Catalog Number: 82946 Enrollment: Limited to 15.
Tamara Griggs
Half course (fall term). Th., 1–3.
This course will focus on the changing interpretations and representations of North America by early modern Europeans, including humanist scholars, Jesuit missionaries, Puritan propagandists, naturalists, cartographers, political theorists, poets, and artists. The course will include writings about (and images of) New Spain, the British colonies in North America & the Caribbean, the Dutch New Netherland, and New France (Canada and the lower Mississippi). Readings include Columbus, Cortés, Shakespeare, Montaigne, Defoe, and Buffon.

*History and Literature 90ak. The Vietnam War in American Culture
Catalog Number: 76384 Enrollment: Limited to 15.
Jeanne A. Follansbee and Steven Biel
Half course (fall term). W., 3–5.
Considering a range of texts by and about soldiers and veterans, policy makers and protesters, reporters and refugees, the course explores Americans’ contested and changing understandings of the experiences and meanings of the U.S. war in Vietnam. Texts include popular films, documentaries, journalism, fiction, letters, diaries, government documents, and war memorials.

*History and Literature 90am. The Legacy of War in Modern Europe: Forgetting and Remembering after 1945
Catalog Number: 70183 Enrollment: Limited to 15.
Juliet Clare Wagner
This seminar addresses the history of European culture in the aftermath of the Second World War, studying how German, French and British societies adjusted to recovery from the war and its atrocities. In particular, the course explores how questions of guilt and responsibility emerged
in each country, and how literature and film contributed to greater social awareness of the more shameful aspects of each country’s history, unsettling and re-making popular national mythologies.

*History and Literature 90ap. American Prizefighting, 1801 to the Present - (New Course)
Catalog Number: 52732 Enrollment: Limited to 15.
Eoin Francis Cannon
Half course (fall term). Th., 3–5.
This seminar will explore the history of boxing in the United States, as a significant social and commercial phenomenon in its own right, and as a unique window onto labor practices, race and gender ideologies, and cultural hierarchies in different eras. Readings will be organized around historically resonant fights, and will include media reports, literary texts, films, still images, and scholarship.

*History and Literature 90aq. Nunca Mas: Dictatorships, Torture and Terror in Latin America - (New Course)
Catalog Number: 67839 Enrollment: Limited to 15.
Anna C. Deeny
Half course (fall term). W., 1–3.
What forces brought about the dictatorships of Chile, Argentina and Peru? How did such forces justify themselves? Conversely, how did writers, historians, artists and other individuals respond to conditions of extreme censorship, terror and torture? This course will consider historical, literary and theoretical texts, as well as view art, films, documentaries, theater and videos that consider the Chilean, Argentinean, and Peruvian dictatorships of the 1970s, 80’s and 90’s.

*History and Literature 90as. Black-Blanc-Beur: Colonial Subjects and Popular Culture in the Francophone World - (New Course)
Catalog Number: 16317 Enrollment: Limited to 15.
Rachel A. Gillett
This course examines how French colonial subjects fought back against prejudiced popular images of them as uncivilized, or cultural outsiders. It explores how they represented themselves in contrast to these stereotypes, through popular music, literature, and film. The course places these representations in their historical context. We will examine how they had tangible links to political change, decolonization, and racial tensions in twentieth century France, Africa and the Caribbean.

*History and Literature 90at. The Postwar American Road Narrative - (New Course)
Catalog Number: 26346 Enrollment: Limited to 15.
David J. Alworth
Half course (fall term). M., 3–5. EXAM GROUP: 8, 9
This course examines a vibrant subgenre of post-World War II American literature. We will read major novels by Kerouac, Nabokov, and Didion as well as less familiar (yet still fascinating) writings by Hunter S. Thompson, Tom Wolfe, Patricia Highsmith, Ralph Ellison, and others. In addition, students can expect to analyze both primary and secondary historical sources, while giving some attention to visual art (e.g. John Chamberlain) and to film (e.g. Bonnie and Clyde).
*History and Literature 90g. Charlemagne in History, Story, and Myth
Catalog Number: 4105 Enrollment: Limited to 15.
Sean J. Gilsdorf
Charlemagne long has been seen as the mythic father of nation-states and precursor of a united Europe. We will approach Charlemagne not simply as a legend, however, but as a compelling historical figure. Beginning with the rise of the Frankish monarchy and the emergence of the Carolingian dynasty, we will turn to consider the figure of Charlemagne himself and the kingdom that he controlled, before exploring Charlemagne’s historical, political, and symbolic legacy.

*History and Literature 90l. Stories of Slavery and Freedom
Catalog Number: 5335 Enrollment: Limited to 15.
Timothy P. McCarthy
In the last generation, scholars have revolutionized our understanding of slavery and freedom in the modern Atlantic world. This sea-change has been the result of a major methodological shift: to view this history through the eyes of slaves rather than the eyes of masters. This course will examine the history of the "black Atlantic" through a diverse range of cultural texts--poetry, pamphlets, court cases, petitions, autobiographies, novels, speeches, and sermons--produced by slaves, free blacks, and abolitionists from the Age of Revolution to emancipation.

*History and Literature 90n. Historical Representation in 19th-c. America
Catalog Number: 8909 Enrollment: Limited to 15.
Peter Becker
This course focuses on the competition over historical representation in the nineteenth century, which saw the beginning of historiographical writing in the modern sense. We will analyze its emergence in the context of its competitors and predecessors: the historical novel, romantic historiography, travelogue, romance, autobiography, realist fiction, journalism and photography. The course examines how these different genres changed the relationship between individual and environment, self and authority, fact and fiction.

Tutorials, for Undergraduates Only

*History and Literature 91r. Supervised Reading and Research
Catalog Number: 0334
Jeanne A. Follansbee and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: History and Literature concentrators may arrange individually supervised reading and research courses; the permission of the Director of Studies is required for these courses.

*History and Literature 97. Tutorial — Sophomore Year
Catalog Number: 1148
Jeanne A. Follansbee and members of the Committee
Half course (spring term). M., 2–5; M., 2–5; Tu., 1–4; Tu., 1–4; W., 2–5; W., 2–5; W., 2–5; Th.,
2–5; Th., 2–5.
Introduction to interdisciplinary methods and to topics in students’ chosen fields. Required of all concentrators. Open only to concentrators.

*History and Literature 98r. Tutorial — Junior Year
Catalog Number: 2766
Jeanne A. Follansbee and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
An individually supervised study of selected topics in the student’s chosen field in History and Literature.
*Note: Ordinarily taken as two half courses by juniors. Required of all concentrators.

*History and Literature 99. Tutorial — Senior Year
Catalog Number: 5362
Jeanne A. Follansbee and members of the Committee
Full course. Hours to be arranged.
Research and writing of the senior thesis; preparation for the oral exam.
(Note: Ordinarily taken by seniors as a full course. Required of all concentrators.

Cross-listed Courses

*English 90ht. How to Read a Book: Seminar - (New Course)
[*History 72k. The Worlds of Joseph Conrad]
[*History 81j. What Was an Early Modern Author?]

A list of the courses in other departments that count for History and Literature is available in our office at the Barker Center and at www.fas.harvard.edu/~histlit.

History of American Civilization

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in the History of American Civilization

Jennifer L. Roberts, Professor of History of Art and Architecture (Chair)
David R. Armitage, Lloyd C. Blankfein Professor of History
Sven Beckert, Laird Bell Professor of History (on leave 2012-13)
Robin M. Bernstein, Associate Professor of African and African American Studies and of Studies of Women, Gender, and Sexuality
2012-2013 Previous Courses of Instruction

Steven Biel, Senior Lecturer on History and Literature
Ann D. Braude, Director of the Women’s Studies in Religion Program (Divinity School)
Stephen Louis Burt, Professor of English
Daniel P. Carpenter, Allie S. Freed Professor of Government
Glenda R. Carpio, Professor of English and of African and African American Studies
Joyce E. Chaplin, James Duncan Phillips Professor of Early American History
Amanda Claybaugh, Professor of English
Nancy F. Cott, Jonathan Trumbull Professor of American History (on leave 2012-13)
Christine Desan, Professor of Law (Law School)
Henry Louis Gates, Jr., Alphonse Fletcher, Jr. University Professor
Claudia Goldin, Henry Lee Professor of Economics
David Neil Hempton, Dean of the Faculty of Divinity, John Lord O’Brien Professor of Divinity
and Alonzo L. McDonald Family Professor of Evangelical Theological Studies (Divinity School)
Evelyn Brooks Higginbotham, Victor S. Thomas Professor of History and of African and
African American Studies
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African
and African American Studies, Harvard College Professor
Morton J. Horwitz, Charles Warren Professor of American Legal History (Law School)
Andrew Jewett, Associate Professor of History and of Social Studies
Walter Johnson, Winthrop Professor of History and Professor of African and African American
Studies
Robin E. Kelsey, Shirley Carter Burden Professor of Photography
Alexander Keyssar, Matthew W. Stirling, Jr. Professor of History and Social Policy at the
Kennedy School of Gov’t (Kennedy School)
Ju Yon Kim, Assistant Professor of English
James T. Kloppenberg, Charles Warren Professor of American History (on leave 2012-13)
Carrie Lambert-Beatty, Professor of History of Art and Architecture and of Visual and
Environmental Studies
Jill M. Lepore, David Woods Kemper ’41 Professor of American History, Harvard College
Professor
Lisa M. McGirr, Professor of History (on leave 2012-13)
Daniel P. McKanan, Ralph Waldo Emerson Unitarian Universalist Association Senior Lecturer
in Divinity (Divinity School)
Louis Menand, Anne T. and Robert M. Bass Professor of English (on leave fall term)
Elisa New, Powell M. Cabot Professor of American Literature
Carol J. Oja, William Powell Mason Professor of Music (on leave 2012-13)
Orlando Patterson, John Cowles Professor of Sociology
Julie A. Reuben, Professor of Education (Education School)
Marc Shell, Irving Babbitt Professor of Comparative Literature and Professor of English
Werner Sollors, Henry B. and Anne M. Cabot Professor of English Literature and Professor of
African and African American Studies (on leave spring term)
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of
African and African American Studies
John Stauffer, Professor of English and of African and African American Studies
Laurel Thatcher Ulrich, 300th Anniversary University Professor
Other Faculty Offering Instruction in the History of American Civilization

This program is interdisciplinary. Students are also referred to course offerings at the Design School, Harvard Graduate School of Education, Kennedy School, and Law School. For further information about the variety of course offerings in specific departments, consult the office of the Committee, Barker Center 225, 12 Quincy Street.

Primarily for Graduates

*American Civilization 200 (formerly *American Civilization 370). Major Works in the History of American Civilization
Catalog Number: 3662
Jill M. Lepore
Half course (fall term). Th., 12–2. EXAM GROUP: 14, 15
A survey of the field, with an emphasis on the range of interdisciplinary methods in the humanities, history, and social sciences.
Note: Required of first and second-year graduate students in American Civilization and open to others by permission of the instructor.

*American Civilization 201 (formerly *American Civilization 371). Themes in the History of American Civilization
Catalog Number: 6797
Jennifer L. Roberts
Half course (fall term). W., 10–12. EXAM GROUP: 3, 4
Interdisciplinary study of one or several topics.
Note: Required of first and second-year graduate students in American Civilization and open to others by permission of the instructor.

Graduate Courses

*American Civilization 398. Reading and Research
Catalog Number: 1710
2012-2013 Previous Courses of Instruction

4599 (on leave 2012-13), Julie A. Reuben (Education School) 4428, Jennifer L. Roberts 4407, Joseph Singer (Law School) 7237, Werner Sollors 7424 (on leave spring term), Rachel St. John 5328, John Stauffer 1006, Maria Tatar 3645, Laurel Thatcher Ulrich 1886, Helen Vendler 7226, Adelheid Voskuhl 5569 (on leave 2012-13), and Joanne van der Woude 6069

*American Civilization 399. Direction of Doctoral Dissertation
Catalog Number: 8803

Cross-listed courses are no longer listed here. For a list of courses offered by members of the Committee on Higher Degrees in the History of American Civilization, and other courses of interest in American studies, contact the program office at amciv@fas.harvard.edu.

History of Art and Architecture

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of History of Art and Architecture

Robin E. Kelsey, Shirley Carter Burden Professor of Photography (Chair)
Ruth Bielfeldt, Assistant Professor of History of Art and Architecture
David Bindman, Visiting Professor of History of Art and Architecture
Suzanne P. Blier, Allen Whitehill Clowes Professor of Fine Arts and Professor of African and African American Studies
Benjamin Buchloh, Andrew W. Mellon Professor of Modern Art
Joseph Connors, Professor of History of Art and Architecture
Thomas B. F. Cummins, Dumbarton Oaks Professor of the History of Pre-Columbian and Colonial Art (on leave 2012-13)
Frank Fehrenbach, Professor of History of Art and Architecture
Evrídiki Georganíl, Visiting Lecturer on History of Art and Architecture and Medieval Studies
Maria Elizabeth Gough, Joseph Pulitzer, Jr. Professor of Modern Art (Director of Graduate Studies)
Jeffrey F. Hamburger, Kuno Francke Professor of German Art and Culture
Zaneta H. Hong, Visiting Lecturer in Landscape Architecture (Design School)
Ioli Kalavrezou, Dumbarton Oaks Professor of Byzantine Art
Jinah Kim, Assistant Professor of History of Art and Architecture (on leave 2012-13)
Joseph Koerner, Victor S. Thomas Professor of History of Art and Architecture (on leave 2012-13)
Ewa Lajer-Burchard, William Dorr Boardman Professor of Fine Arts
Carrie Lambert-Beatty, Professor of History of Art and Architecture and of Visual and Environmental Studies
Neil Levine, Emmet Blakeney Gleason Professor of History of Art and Architecture (on leave fall term)
Yukio Lippit, Professor of History of Art and Architecture (on leave 2012-13)
Stephen L. Little, Visiting Lecturer on History of Art and Architecture
Anne Nishimura Morse, Visiting Lecturer on History of Art and Architecture
Gülrü Necipoglu-Kafadar, Aga Khan Professor of Islamic Art
Alina A. Payne, Professor of History of Art and Architecture (on leave spring term)
Jennifer L. Roberts, Professor of History of Art and Architecture
David J. Roxburgh, Prince Alwaleed bin Talal Professor of Islamic Art History (Director of Undergraduate Studies)
Hugo van der Velden, Professor of History of Art and Architecture
Eugene Wang, Abby Aldrich Rockefeller Professor of Asian Art (on leave fall term)
Henri Zerner, Professor of History of Art and Architecture (on leave spring term)

Other Faculty Offering Instruction in the History of Art and Architecture

Tom Conley, Abbott Lawrence Lowell Professor of Romance Languages and Literatures and of Visual and Environmental Studies
Sonja Dümplemann, Associate Professor of Landscape Architecture (Design School)
K. Michael Hays, Eliot Noyes Professor in Architectural Theory (Design School)
Melissa M. McCormick, Professor of Japanese Art and Culture (on leave 2012-13)
David G. Mitten, James Loeb Professor of Classical Art and Archaeology, Emeritus
Robert D. Mowry, Senior Lecturer on History of Art and Architecture and Alan J. Dworky Curator of Chinese Art (Sackler Museum)
Gloria Ferrari Pinney, Professor of Classical Archaeology and Art, Emeritus
Victor Stoichita, Zobel de Ayala Visiting Professor of History of Art and Architecture (University of Fribourg)
Irene J. Winter, William Dorr Boardman Professor of Fine Arts, Emerita

Affiliates of the Department of the History of Art and Architecture
Melissa M. McCormick, Professor of Japanese Art and Culture (on leave 2012-13)
Adrian Staehli, Professor of Classical Archaeology

Courses in the History of Art and Architecture undergraduate curriculum are structured as a three-tier system, consisting of a sequence of introductory courses, upper-level courses and departmental tutorials. Passage through the sequence from entry level to more advanced classes is encouraged—particularly for prospective concentrators.

History of Art and Architecture (HAA) 1, HAA 10, HAA 11 are general, conceptual introductions to World Art from pre-history to the present, History of Later Western Art, and History of World Architecture, respectively, each of which would serve as a point of entry into the courses and concentration of History of Art and Architecture.

History of Art and Architecture 12–89 constitute field-specific introductions to the major subfields of art history and their associated methodologies. These introductory courses are intended both for students in the concentration and for non-concentrators with an interest in a particular subject within History of Art and Architecture.

History of Art and Architecture 100–199, upper-level courses, tend to focus upon a particular problem or set of materials within a subfield.

**Primarily for Undergraduates**

**History of Art and Architecture 1. Landmarks of World Art & Architecture**
Catalog Number: 3951

*Suzanne P. Blier and members of the Department*

*Half course (fall term). M., W., at 12; . EXAM GROUP: 5*

Examines major works of world art and architecture and the unique aesthetic, cultural, and historical issues that frame them. Members of the faculty will each lecture on an outstanding example in their area of expertise, covering various media and drawing from such diverse cultures as modern Europe and United States, early modern Japan, Renaissance Europe, ancient Mesopotamia and China, and Precolumbian America. Sections will focus on significant issues in the analysis and interpretation of art and architecture.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**[History of Art and Architecture 10. The Western Tradition: Art Since the Renaissance]**
Catalog Number: 4988

*Henri Zerner*

*Half course (fall term). Tu., Th., at 12 . EXAM GROUP: 14*

Concentrating on painting but with reference to other media, we examine art between the beginning of Modern Times around 1400 until the present. It is team taught and organized around specific topics each occupying one week. It is organized chronologically but does not attempt to be a comprehensive survey, but rather to highlight important issues, debates,
innovations, specific works or artists.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

History of Art and Architecture 11. Landmarks of World Architecture
Catalog Number: 3675
K. Michael Hays (Design School) and members of the Department and the GSD faculty
Half course (spring term). Tu., Th., at 12. EXAM GROUP: 14
Examines major works of world architecture and the unique aesthetic, cultural, and historical issues that frame them. Faculty members will each lecture on an outstanding example in their area of expertise, drawing from various periods and such diverse cultures as modern and contemporary Europe and America, early modern Japan, Mughal India, Renaissance and medieval Europe, and ancient Rome. Sections will develop thematically and focus on significant issues in the analysis and interpretation of architecture.
Note: This course, when taken for a letter grade, meet the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirements for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

History of Art and Architecture 13x. Introduction to Greek and Roman Sculpture
Catalog Number: 90417
Ruth Bielfeldt
Half course (spring term). M., W., at 11. EXAM GROUP: 4
Greek sculpture has shaped the way we look at art. The course will introduce you to the central works of Greek and Roman sculpture (800 BC - 300 AD), both free-standing and architectural, and discuss different ways of analysis and interpretation. Key themes of the lectures are the ‘invention’ of the human body, portrait and individualism, presenting the divine, Greek and non-Greek, emotions, art and beholder, lifelikeness, but also questions of color and materiality.
Note: Expected to be given in 2013–14.

History of Art and Architecture 18p. The Japanese Woodblock Print
Catalog Number: 78376
Yukio Lippit
Half course (fall term). M., W., at 12. EXAM GROUP: 5
This course provides an introduction to Japanese art and cultural history through a survey of the Japanese woodblock print from its emergence in the mid-17th century to the modern era. Technical developments, major genres, and master designers are explored within the context of Japan’s pictorial traditions and evolving urban culture. Topics for consideration include aesthetic discourse, censorship, erotica, Japonisme, the construction of social identity, print culture, and the representation of war.
Note: Expected to be given in 2013–14.

Catalog Number: 6427
Alina A. Payne  
**Half course (fall term). Tu., Th., at 12; EXAM GROUP: 14**
Charts the rise and dissemination of classicism in Renaissance Europe. Lectures focus on the development of the style, its origin in the fascination with antiquity, its response to shifts in social and political life, its mechanisms of transmission (travel, book and print culture) as well as phenomena of exchange (with the East), colonial export, and resistance to this pan-European trend.

**History of Art and Architecture 65. Baroque Art - (New Course)**
Catalog Number: 88688  
Joseph Connors  
**Half course (fall term). Tu., Th., at 2. EXAM GROUP: 16**
Art of the seventeenth century in Europe, including genial works by Caravaggio (and his followers), Annibale Carracci, Bernini, Cortona, Poussin, Claude Lorrain, Ribera, Velazquez, Rubens, Van Dyck, Le Brun, Rembrandt, and Vermeer, as well as the global diffusion of the Baroque Style.

[**History of Art and Architecture 70. Introduction to Modern Art and Visual Culture, 1700–1990s**]
Catalog Number: 4593  
Ewa Lajer-Burcharth  
**Half course (fall term). Tu., Th., at 11.**
What is modernity, and what is the place of visual representation within modern culture? What conceptions of individuality, originality, and desire are at work in the idea of “the artist” in the modern period? Traversing different styles—Rococo, Neo-classicism, Impressionism, Abstraction—we discuss a range of modern media, from painting, sculpture, prints, and photography to video, installation, and performance art.  
**Note:** Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

*History of Art and Architecture 91r. Directed Study in History of Art and Architecture*
Catalog Number: 1028  
David J. Roxburgh and members of the Department  
**Half course (fall term; repeated spring term). Hours to be arranged.**  
**Note:** Limited to juniors and seniors. Students wishing to enroll must petition the Head Tutor for approval, stating the proposed project, and must have the permission of the proposed instructor.

*History of Art and Architecture 96a. Architecture Studio 1: Transformations - (New Course)*
Catalog Number: 60638 Enrollment: Limited to 12.  
Zaneta H. Hong (Design School)  
**Half course (spring term). W., F., 1–4.**
This course introduces basic architectural concepts and techniques used to address issues of form, function, ornament, and material. The course provides instruction in project analysis, visualization, communication, and fabrication, using both physical and digital models. Students
proceed through a series of progressively complex investigations of transformational processes, context, program, and material assemblage.

*History of Art and Architecture 97r. Sophomore Tutorial
Catalog Number: 0935
David J. Roxburgh and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Required of concentrators.

*History of Art and Architecture 98ar. Faculty Tutorial
Catalog Number: 1328
David J. Roxburgh and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Required of concentrators.

*History of Art and Architecture 98br. Methods Tutorial
Catalog Number: 3507
David J. Roxburgh and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Required of concentrators.

*History of Art and Architecture 99. Tutorial - Senior Year
Catalog Number: 3118
Frank Fehrenbach and members of the Department
Full course. Hours to be arranged. EXAM GROUP: Spring: 8, 9
Note: Intended for honors candidates in History of Art and Architecture. Permission of the Head Tutor required.

For Undergraduates and Graduates

*History of Art and Architecture 100r. Sophomore Excursion Course
Catalog Number: 9414 Enrollment: Limited to 20. Open only to sophomore concentrators in HAA.
Jeffrey F. Hamburger and Ruth Bielfeldt
Half course (spring term). Hours to be arranged.
This course introduces sophomore concentrators to on-site study of art and architecture through the case study of a particular geographic and cultural area. This year: Provence and Burgundy, Medieval and Ancient Art
Note: Excursion is optional; not a requirement.

[History of Art and Architecture 120n. Art of the Timurids in Greater Iran and Central Asia]
Catalog Number: 9252 Enrollment: Limited to 15.
David J. Roxburgh
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Critical examination of the arts of the book, portable arts, and architecture sponsored by the
Timurids (1370-1507), a dynasty founded by Timur (Tamerlane). Emphasis will also be given to primary written sources in translation.

*Note:* Expected to be given in 2013–14.

**[History of Art and Architecture 124e. Architecture of the Early Modern Islamic Empires: Proseminar]**
Catalog Number: 26493 Enrollment: Limited to 15.
Gülru Necipoglu-Kafadar
*Half course (fall term). Tu., 1–3.*
Between the 16th and 18th centuries, three great empires ruled the Islamic lands from the Balkans to Bengal. The Mediterranean-based Ottomans, Safavids in Iran, and Mughals in India, developed visual cultures with distinctive architectural and ornamental idioms, originating from a shared Timurid heritage. The cities, monuments, and modes of ornament created in each empire are studied from aesthetic and contextual perspectives, with respect to religious orientations, imperial ideologies, and theories of dynastic legitimacy.

*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 128. Topics in Arabic Art and Culture: The Medieval Mediterranean**
Catalog Number: 6008 Enrollment: Limited to 12.
David J. Roxburgh
*Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18*
A problem oriented inquiry into the art and architecture (ca. 750 to 1300) of the Arab lands, focusing on regions circling the Mediterranean, from the Iberian Peninsula to Iraq. Materials (art of book, portable arts, epigraphy, architecture) and geographic focus vary. Themes also change, but include relations between art and literature, aesthetics, vision and perception, courtly culture, mercantile patronage, cultural continuities and resurgences. Al-Andalus and the Maghrib are the focus in 2012.

**[History of Art and Architecture 132e. The Ideal of the Everyday in Greek Art]**
Catalog Number: 13661 Enrollment: Limited to 15.
Ruth Bielfeldt and Susanne Ebbinghaus
*Half course (spring term). Th., 3–5.*
Greek painted pottery provides a direct window onto ancient Greek society and how this society visually constructed its ideal self. Working with objects from the Harvard Art Museums, this course will look at Greek vases as material and aesthetic agents in social rituals, giving special attention to object use and strategies of design in the figure decoration. Images of banqueting, athletic and poetic performances, cult practice, domestic activities, war and death will be discussed.

*Note:* Expected to be given in 2013–14.

**[History of Art and Architecture 137p. The Roman Dinner Party: Proseminar]**
Catalog Number: 38895
Ruth Bielfeldt
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
The banquet is the key event of Roman elite society. It involved not only luxurious and well
staged food and wine, but proper behavior, a decent setting, luxury furniture, entertainment and enchantment. The seminar discusses visual, archaeological and literary evidence to explore the sensual culture of the Roman dinner party - oscillating between strict social rules, intellectual talk, the theatrical orchestration of high cuisine, revelry, eroticism and bodily excess. 

**Note:** Expected to be given in 2013–14.

**History of Art and Architecture 139j. Greek Myths on Roman Sarcophagi**
Catalog Number: 1094 Enrollment: Limited to 12.
*Ruth Bielfeldt*
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
In second-century Rome, Greek Myths enter a new sphere: tombs. But the mythological narratives adorning the imperial relief sarcophagi are more than traditional tales being retold. Their original visual language, combining Greek and Roman motifs, turns the caskets into powerful mediators that help express central experiences of life and death. In this seminar we will examine the complex imagery of Roman sarcophagi and interpret the mythological narratives from different perspectives – contextual, cultural, social, and philosophical.

**History of Art and Architecture 141k. Rome, Constantinople, Ravenna in the Light of Imperial Rule : Proseminar**
Catalog Number: 0268 Enrollment: Limited to 15.
*Ioli Kalavrezou*
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
The seminar will focus on the imperial art and architecture in these cities and their impact, covering the period from Constantine I to Justinian I (4th - 6th c.).

**History of Art and Architecture 142v. From Croesus to Medici**
Catalog Number: 50437 Enrollment: Limited to 12.
*Evridiki Georganteli*
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
Coins, seals and medals were until the early modern period the most circulated art media, charged with political and religious messages that shaped the way individuals, cities and empires viewed themselves and their neighbors. The course explores numismatic production and diffusion from 7th-century BC Asia Minor to 17th-century Italy; the dynamics between patrons and artists responsible for numismatic designs and messages; coin and medal collections and the legacy of antiquity in medieval and early modern European courts.

**History of Art and Architecture 143r (formerly *History of Art and Architecture 143m). The Art of the Court of Constantinople : Proseminar**
Catalog Number: 4412 Enrollment: Limited to 15.
*Ioli Kalavrezou*
*Half course (spring term). Th., 3–5; Tu., 1–3. EXAM GROUP: 17, 18*
Concentrates on art and architecture created for the court of Constantinople from the 9th to the 12th century. Focuses on objects and monuments, exploring their role in political, religious, and
personal events.

Note: Expected to be given in 2013–14.

**History of Art and Architecture 145p. Court and Cloister in the Late Middle Ages - (New Course)**
Catalog Number: 82487
Jeffrey F. Hamburger
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
Courtly culture and patronage in Paris, Prague, and Burgundy, with an emphasis on issues of artistic exchange, dynastic commemoration, princely piety, the development of secular genres, and the emergence of the court artist.

**History of Art and Architecture 151k. Italian Artists as Competitors, ca. 1300-1700**
Catalog Number: 3100 Enrollment: Limited to 15.
Frank Fehrenbach
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
Artistic competitions, sometimes accompanied by deadly hostility among artists, played a central role in early modern Italy. Examples include the famous competitions between Ghiberti and Brunelleschi; Leonardo and Michelangelo; Cellini and Bandinelli; Bernini and Borromini.

**[History of Art and Architecture 151v. Painting in Renaissance Venice] - (New Course)**
Catalog Number: 30965
Frank Fehrenbach
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
This new proseminar will develop both a survey of the most significant century of Venetian painting and a focus on paradigmatic works from Giovanni Bellini and Giorgione to Titian and Jacopo Tintoretto.

Note: Expected to be given in 2013–14.

**History of Art and Architecture 152m. Leonardo da Vinci**
Catalog Number: 3017
Frank Fehrenbach
*Half course (spring term). M., W., at 12. EXAM GROUP: 5*
This course focuses on the main topics and development in Leonardo’s art, science, and technology, contextualizing him in the artistic, cultural and political setting of Renaissance Italy around 1500, and including the history of interpretations from Vasari to Dan Brown. The interdependence of art and science, but also the internal tensions of this relationship, make Leonardo’s work particularly relevant for the “iconic turn” in contemporary culture.

**History of Art and Architecture 154g. Dutch Art of the Golden Age**
Catalog Number: 72761
Hugo van der Velden
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*
This seminar will focus on the works of Rembrandt, Vermeer, Frans Hals and many other Dutch masters who were active in the seventeenth century. Painting flourished like never before in the Dutch Republic, where a largely secular, mostly bourgeois, predominantly modern, new art
emerged in cities like Amsterdam, Haarlem and Delft. We will study the most important artists and paintings. Course work includes frequent use of the collections at Harvard and in the Boston area.

**History of Art and Architecture 159. Art and Literature in Renaissance France**

Catalog Number: 5699 Enrollment: Limited to 15.

*Henri Zerner and Tom Conley*

*Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18*

This course is an introduction to the culture of France in the Renaissance. It will deal with both verbal and visual expression. Major authors will include Francois Villon, Ronsard, Rabelais, and Montaigne; as well as the artists, Primaticcio, Philibert De Lorme, Pierre Lescot, the architect of the Louvre, and Jean Goujon.

**History of Art and Architecture 161v. Rome: An Architectural History**

Catalog Number: 86032

*Joseph Connors*

*Half course (spring term). W., 3–5. EXAM GROUP: 8, 9*

An architectural history of Rome from the empire through the early Christian and medieval city, the Renaissance revival of antiquity, Baroque planning, and early archeology to Fascism and modernism, including the imperial fora, aqueducts, fountains, medieval basilicas, the piazza, villas, gardens, St. Peter’s and the Vatican complex.

*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 163p. Piranesi**

Catalog Number: 64724 Enrollment: Limited to 15.

*Joseph Connors*

*Half course (fall term). M., 3–5. EXAM GROUP: 8, 9*

Piranesi as architect, archeologist, and above all, printmaker of genius, from his Venetian origins through the vedute and the ‘Prisons’ to the reconstruction of ancient Rome, with forays into early Egyptology, the Graeco-Roman controversy, Piranesi’s built and projected architecture, and his influence on Robert Adam and John Soane. First-hand examination of original prints and maps in Harvard Collections and an introduction to the technique of etching.

*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 165x. Baroque Architecture-(New Course)**

Catalog Number: 37166

*Joseph Connors*

*Half course (spring term). W., F., at 12. EXAM GROUP: 5*

Genial architecture, gardens, and urban planning from 1600 to 1750 in Rome (Maderno, Borromini, Bernini, Cortona, Piranesi), Naples (Fanzago), Sicily, Turin (Guarini), Venice (Longhena), Paris and Versailles (Le Vau, Le Nôtre, François & Jules Hardouin-Mansart, Perrault), London (Jones, Wren, Hawksmoor, Vanbrugh), Vienna (Fischer von Erlach), Prague (Santini Aichel), Madrid, Salamanca, Lisbon, Mafra, Goa, Vilnius, Warsaw, and St. Petersburg. Issues to be treated include urban planning, landscape, water and fountains, earthquake reconstruction, the influence of mathematics and the sciences, architectural drawing and the
illustrated architectural book.  
Note: Offered jointly with the Design School as GSD HIS 004361.

**[History of Art and Architecture 166n. Bernini and Borromini: Proseminar]**
Catalog Number: 85163 Enrollment: Limited to 25.

*Joseph Connors*

Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16

The great creators and creations of 17th century Rome in sculpture, architecture, fountains, theater, gardens, urban planning, and ephemeral art.

Note: Expected to be given in 2013–14.

Catalog Number: 52273

*Joseph Connors*

Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18

The Vatican in antiquity, the necropolis, and the basilica from Constantine to 1500. New St. Peter’s from Bramante to Michelangelo, Maderno, Bernini and Baroque transformations. The medieval palace, the Belvedere Statue Court, the Borgia Apartment, the Raphael Stanze. The Vatican Library and creation of the Vatican Museum. Vatican City 1923-2000.

Note: Expected to be given in 2013–14.

**[History of Art and Architecture 170v. Vienna, City of Dreams]**
Catalog Number: 79831 Enrollment: Limited to 15.

*Joseph Koerner*

Half course (spring term). M., 1–3. EXAM GROUP: 6, 7

At around 1900, the city of Vienna experienced a cultural flowering. Studying achievements in art, design, architecture, and urban planning, as well as in literature, psychoanalysis, music, and philosophy, this course explores Vienna, an uncanny space where many of the dreams - and nightmares - of modernity first were dreamt. Individuals studied include Klimt, Schiele, Kokoschka, Kubin, Loos, Wagner, Sitte, Schnitzler, Musil, Kafka, Freud, Hertzl, Schoenberg, and Wittgenstein.

Note: Expected to be given in 2013–14.

**History of Art and Architecture 170z. Baghdad in the 1950s: Architecture and Urbanism during the First Oil Boom: Seminar - (New Course)**
Catalog Number: 37978 Enrollment: Limited to 12.

*Neil Levine*

Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18

Examines the extraordinary program of commissions to internationally famous architects and planners funded by Iraq’s new oil revenues to remake Baghdad on modern lines. Projects by Frank Lloyd Wright, Le Corbusier, Alvar Aalto, and Walter Gropius among others, will be studied in relation to Baghdad’s urban history, contemporary culture, and the problem of importing Western models.

**History of Art and Architecture 171p. From Mother Earth to Planet Mars: Designed Landscapes, 1850-2013 - (New Course)**
Catalog Number: 36155  
*Sonja Duempelmann (Design School)*  
**Half course (spring term). M., W., at 10. EXAM GROUP: 3**  
This course is an introduction to designed landscapes, and landscape architecture since 1850. Thematic lectures will focus on the history and theory of designed landscapes in the Western world. They will also address landscape creations of the Eastern civilizations and of other time periods as they become relevant for the topics and objects discussed in this class. Students will be able to develop critical and formal analytical skills that facilitate the reading and interpretation of designed landscapes as both physical spaces and as cultural media that sit at the nexus between art and science.

[*History of Art and Architecture 171x. Exoticism & Orientalism]*  
Catalog Number: 7006 Enrollment: Limited to 15.  
*Ewa Lajer-Burcharth*  
**Half course (fall term). W., 3–5. EXAM GROUP: 8, 9**  
Explores cultural and artistic engagement with the trope of the "other" in 18th and 19th century France. Different interpretive paradigms will be considered. Distinction between pre- and post-Napoleonic modes of curiosity emphasized. Artists will include: Watteau, Boucher, Liotard, Van Loo, Delacroix, Chassériau, Gérôme, Renoir.  
*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 172w. American Art and Modernity, 1865–1965**  
Catalog Number: 2227  
*Jennifer L. Roberts*  
**Half course (fall term). Tu., Th., at 11; . EXAM GROUP: 13**  
An introduction to developments in American art between the Civil War and the Cold War. Thematically focused lectures concentrate on such issues as the shifting status of the art object within an environment of proliferating consumer products, the incorporation of scientific and industrial processes into artistic practice, the continually renegotiated relationship between nationalism and abstraction, and new methods of understanding history and subjectivity in the face of urbanization, mechanized reproduction, and the mass media.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**History of Art and Architecture 173m. The Early Modern Artist**  
Catalog Number: 7574 Enrollment: Limited to 12.  
*Ewa Lajer-Burcharth*  
**Half course (fall term). W., 3–5. EXAM GROUP: 8, 9**  
Explores the emergence of artistic individuality in French 18th-century art and culture. What was modern about the 18th-century artist? What were the criteria of artistic self-definition? Among the issues addressed: the cultural myth of the artist; artist vs. critic; artistic identity and the philosophical notions of the self; subjectivity, sexuality, and gender; the artist’s touch; authorship; melancholia; eccentricity; the artist’s body; fashion. Artists include: Watteau, Chardin, Fragonard, Vigée-Lebrun, David, Girodet. Museum trip(s).
[History of Art and Architecture 174s. Body Image in French Visual Culture: 18th and 19th Century]
Catalog Number: 9158
Ewa Lajer-Burcharth
Half course (fall term). Tu., Th., at 1. EXAM GROUP: 15
Functions and meanings of the body as privileged visual signifier in French visual arts (painting, sculpture, printed imagery, photography). Body image seen as both instrument of different discourses of modernity and a site of resistance to them. Among the issues addressed: the king’s body, republican corporeality; the problem of the nude, bodily spectacles; race; otherness; androgyny; monstrosity; pornography; representations of hysteria; images of desire; fetishism; body and/in space; body and the self.
Note: Expected to be given in 2013–14.

Catalog Number: 6910
Benjamin Buchloh
Half course (spring term). M., W., at 12. EXAM GROUP: 5
This course will examine artistic production in the US and Europe between 1945 and 1975 to clarify some of the most crucial questions of this thirty year period: How did post war visual culture repress or acknowledge the recent ‘caesura of civilization’ brought about by World War II?; how did the neo-avantgarde position itself with regard to the legacies of the avantgardes of the 1920s?; how did artistic production situate itself in relation to the newly emerging apparatus of Mass Media culture?
Note: Expected to be given in 2013–14.

[*History of Art and Architecture 176m. Berlin & Moscow, 1918/1933 : Proseminar]
Catalog Number: 69109 Enrollment: Limited to 15.
Benjamin Buchloh and Maria Elizabeth Gough
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
A comparative examination of the two greatest cultural experiments of the early 20th century - Weimar Germany and the Soviet Union - and the extraordinary dialogue that took place between them. Major topoi include the proliferation and intersection of various dadas, constructivisms, and realisms; the concepts of estrangement and alienation; the rise of photomontage, photo-illustrated magazines, monumental photography, and new media technologies; theories of technological reproducibility and distribution; and the perennial question of the relationship between aesthetics and politics.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 178m. Cold War Photography]
Catalog Number: 8383 Enrollment: Limited to 15.
Robin E. Kelsey
Half course (spring term). W., 4–6. EXAM GROUP: 9
This course will consider the intersection of photography and social history in the United States from 1945-1989 through an examination of key photographic practices, publications, exhibitions, and critical texts.
Note: Expected to be given in 2013–14.
**History of Art and Architecture 181v. Daoist Art - (New Course)**
Catalog Number: 14481 Enrollment: Limited to 12.
*Stephen L. Little*

*Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18*

The seminar will examine the transformation of Daoism from philosophy to religion, the paradoxical nature of Daoist thought, Daoist cosmology, the relationship of Daoist art to Buddhist art, Daoist ritual and talismanic calligraphy, depictions of the Daoist pantheon, mythical and historical narratives of "perfected beings" (immortals), Daoist architecture, the arts of "outer" and "inner" alchemy, and the relationship of Daoism to Chinese landscape painting.

[*History of Art and Architecture 181z (formerly History of Art and Architecture 281z). Chinese Art of the Ineffable]*
Catalog Number: 11386 Enrollment: Limited to 12.
*Eugene Wang*

*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*

Tumultuous historical changes elicit strong responses, often producing the state of the ineffable. Explores the ways in which ink-and-brush painting sublimates historical experiences in articulating the ineffable through orchestration of its formal properties.

*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 183m. The Japanese Image Replicated: Woodblocks, Postcards, and Photographs - (New Course)**
Catalog Number: 50896 Enrollment: Limited to 12.
*Anne Nishimura Morse*

*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*

An examination of Japanese woodblock prints from the seventeenth through the early twentieth century give a window onto visual literacy, technology, celebrity, and censorship. Postcards, which replaced the print in the early twentieth century, will be the focus of discussions about propaganda. Photographs provide a vehicle for an investigation of the importation of Western culture and modernism. The course will make extensive use of local museum collections.

**History of Art and Architecture 193g. Global Africa: Introduction to Art and Visual Culture**
Catalog Number: 58982 Enrollment: Limited to 12.
*Suzanne P. Blier*

*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*

An introduction to key traditions of African art and design as seen both on the continent and in global perspective. In this survey of African sculpture, painting, ceramics, architecture, furniture, fashion, decorative arts, popular and performance arts, we also explore issues of identity, religion, politics and history as well as questions of colonial history, art collecting practices, and museum display.

*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 194w. Worlds Fairs**
Catalog Number: 24735
*Suzanne P. Blier*
Half course (fall term). M., 3–5. EXAM GROUP: 8, 9
This seminar addresses questions of cultural display through the art and architecture of world fairs, mid-nineteenth century to present. Students are introduced to the seminal fair events beginning with the Crystal Palace in London, and extending to fairs in the U.S., France, Belgium, Spain, Japan and China. The history of fairs as artistic and social phenomenon is explored along with how these events shaped national identity, ethnicity, social class, race, imperialism, colonialism, and gender.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 197. The Imperial Arts of the Inca and the Aztec]
Catalog Number: 9976
Thomas B. F. Cummins
Half course (fall term). Hours to be arranged.
This course concentrates on the art and architecture of the two ancient American civilizations, surveying the forms of representation used to establish imperial presence within the accepted vernacular of Mesoamerican and Andean artistic traditions. Special attention is given to the role of art as a means of expressing imperial claims to mythic and historic precedents, upon which political and economic expansion could be realized.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B or Foreign Cultures, but not both.

[History of Art and Architecture 197gr. Colonial Art]
Catalog Number: 2623
Thomas B. F. Cummins
Half course (fall term). W., 1–3.
Art and Architecture of the 16th/17th c. in the Spanish New World. The making, the mapping, and imaging of the colonial city.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 199k. The Study of Architectural History : Critical Issues and Methodologies : Seminar]
Catalog Number: 19833 Enrollment: Limited to 12.
Neil Levine and Alina A. Payne
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
This course focuses on issues of method and ideology in the history, criticism, and theory of architecture through close readings of selected texts representing different periods and approaches to the subject. These include foundational works of the discipline as well as recent publications. Considering the various environmental, tectonic, spatial, interpretive, and professional dimensions of architecture, topics will range from theories of site, function, and meaning to means of representation, the client-architect relationship, and concepts of restoration.
Note: Expected to be given in 2013–14.

Primarily for Graduates

[*History of Art and Architecture 206. Science and the Practice of Art History ]
Catalog Number: 6180 Enrollment: Limited to 12.
Narayan Khandekar and staff
Half course (spring term). Tu., 1–3.
The course equips students with critical and informed approaches to the range, applications and ambiguities of instruments employed in the scientific, diagnostic investigation of artworks through lectures, discussions, and close examination of works from the Harvard Art Museums’ collections
Note: Expected to be given in 2013–14.

Catalog Number: 20595 Enrollment: Limited to 12.
Alina A. Payne and Gülru Necipoglu-Kafadar
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
Architecture of the eastern Mediterranean basin (at Italian, Ottoman, and Mamluk courts) with emphasis on cross-cultural encounters and transmission of the Romano-Byzantine heritage, science and technology, architectural practice, ornament, urban design, military, religious and domestic architecture.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 226s. Ottoman Architectural Culture and Urbanism in the Age of Sinan: Seminar]
Catalog Number: 93122 Enrollment: Limited to 12.
Gülrü Necipoğlu-Kafadar
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
Architectural production during the tenure of Ottoman chief court architect Sinan (1539-88) studied from critical and new methodological perspectives. Topics include aesthetics and identity, institutionalization of court architects, building practice, patronage, codes of decorum, textual sources.
Note: Expected to be given in 2013–14.

*History of Art and Architecture 229p. Word and Image in Persian Painting: Seminar
Catalog Number: 2342 Enrollment: Limited to 12.
David J. Roxburgh
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Texts of the Persian literary tradition that were illustrated constitute our focus, including Firdawsi’s Shahnama and Nizami’s Khamsa. Study of word and image is staged through key examples to open new lines of inquiry.

*History of Art and Architecture 240r. Topics in Byzantine Art: Illustrating the Word: manuscripts and their images from the Byzantine religious and secular world
Catalog Number: 4109 Enrollment: Limited to 12.
Ioï Dévérouz
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
The course will concentrate on manuscripts produced after the period of Iconoclasm beginning in the second half of the 9th century. A variety of texts will be examined from courtly as well as
monastic environments.  

*Note:* Open to interested undergraduates.

**[History of Art and Architecture 242. Openings: Issues of Interpretation in Medieval Art: Seminar]**  
Catalog Number: 7561 Enrollment: Limited to 12.  
*Jeffrey F. Hamburger*  
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16  
A wide-ranging introduction to critical approaches to the study of medieval art, with emphasis on systems of signification, mixing historiography and methodology in a workshop format in which students help set the agenda.  
*Note:* Expected to be given in 2013–14.

**[History of Art and Architecture 245x. Jan van Eyck’s Renaissance: Seminar]**  
Catalog Number: 47801 Enrollment: Limited to 12.  
*Hugo van der Velden*  
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9  
Themes include: historical styles, archaism, innovation, epigraphy, the Ghent altarpiece, the rise of painting, function, ritual, context, endowments, saints, land, landscape, court, competition, art theory, painter’s practice, paragone, polyphony, reflection, gold, embroidery, splendor, and Art.  
*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 249n. The Travel Narrative and Art History**  
Catalog Number: 74089 Enrollment: Limited to 12.  
*Hugo van der Velden and David J. Roxburgh*  
Half course (fall term). W., 3–6. EXAM GROUP: 8, 9  
Travel narratives of the medieval through early modern periods recorded by pilgrims, artists, ambassadors, among others, are examined for what they offer to art historical inquiry. Critical texts from Europe and Asia are studied.

**[History of Art and Architecture 251v. Prints and the Pursuit of Knowledge in Early Modern Europe]**  
Catalog Number: 13202 Enrollment: Limited to 12.  
*Joseph Koerner*  
Half course (fall term). Th., 1–3.  
Drawing its focus from the eponymous exhibition at the Sackler Museum, this course investigates how print-makers contributed to, and expanded, knowledge in the culture. Special attention will be paid to the contributions of Albrecht Durer.  
*Note:* Expected to be given in 2013–14.

**History of Art and Architecture 253s. Art Theories of the Italian Renaissance**  
Catalog Number: 78318 Enrollment: Limited to 12.  
*Frank Fehrenbach*  
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16  
Between 1430 and 1600, Italian art theorists provided the framework of the Western discourse on art. Each week, we will discuss one major treatise; readings will be based on the Italian texts.
[History of Art and Architecture 254n. The Art of Death: Italian Renaissance Tombs]
Catalog Number: 37674 Enrollment: Limited to 12.
Frank Fehrenbach
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
We will focus on artistic development between Tino di Camaino and Michelangelo, the culture of memoria, images of the body, liturgy, typology, relationship to space and beholder, materials. Advanced undergraduates welcome.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 255. Giorgio Vasari: Seminar]
Catalog Number: 57654 Enrollment: Limited to 15.
Alina A. Payne
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Examines Giorgio Vasari’s oeuvre as critic, historian, artist and architect as it illuminates conceptions of style, progress, aesthetic quality, artistic personality and exchanges between the arts in Renaissance Italy.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 256v. Rembrandt]
Catalog Number: 89196 Enrollment: Limited to 12.
Hugo van der Velden
Half course (spring term). W., 3–6. EXAM GROUP: 8, 9
Where to begin? Rembrandt’s paintings, prints and drawings, primarily, but anything else that can help to find an angle on this tremendously and overwhelmingly complex artist will be given a fair chance.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 263m. Moving Statues, Breathing Images - Enlivening and animation in Italian Renaissance and Baroque Art]
Catalog Number: 5014 Enrollment: Limited to 12.
Frank Fehrenbach
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Enlivening was arguably the most famous topos in Early Modern art. We inquire of its implications in form, art theory, and history of science. Key terms include: movement, color, composition, opacity, gaze; Genesis, Pygmalion, Medusa, Narcissus.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 271p. Reading, Drawing, Printing Architecture : Seminar]
Catalog Number: 71355 Enrollment: Limited to 12.
Alina A. Payne
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
The architectural book and its readers, authors, circulation and manufacture in the early modern period.

[History of Art and Architecture 271v. Marcel Duchamp: Seminar]
Catalog Number: 18534 Enrollment: Limited to 12.
Benjamin Buchloh
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
The seminar explores Marcel Duchamp’s oeuvre and the recent literature by art historians and philosophers on the subject, as well as the various phases of the Duchamp reception in the practices of major artists in Europe and the United States since the 1950’s.
Note: Expected to be given in 2013–14.

*History of Art and Architecture 271x. The Origins of Modernity: The “New” 18th Century
Catalog Number: 1598 Enrollment: Limited to 12.
Ewa Lajer-Burcharth
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Issues include: art and the public sphere; the birth of the critic; high & low; interiors and interiority; intimacy; artistic identity; sexuality, sexual difference, and gender; the discourse of race. Emphasis on new research and methodologies.

[History of Art and Architecture 272e. Painting and Its Discontents: Seminar]
Catalog Number: 78962 Enrollment: Limited to 12.
Ewa Lajer-Burcharth
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
Explores painting as the privileged medium and institution of artistic modernity (from the late 17th c to the present). Issues: Color; Liveliness; Truth; Autonomy; Subjectivity; Touch; Blindness; the Ready-Made; the Post-Medium Condition.
Note: Expected to be given in 2013–14.

History of Art and Architecture 272k. Visual Culture of Weimar Germany - (New Course)
Catalog Number: 41199 Enrollment: Limited to 12.
Benjamin Buchloh
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
Tracing visual culture from Germany’s imperial provincialism to the avantgarde practices from 1919 - 1937, from the Expressionism debates, to the critiques of DADA artists and Marxist theoreticians, from photomontage to the photography of New Objectivity, from the BAUHAUS’ projects of collectivized production to painting’s return to order, signaling Fascism’s destruction of avantgarde culture in 1937.

[*History of Art and Architecture 272w. Post WW II European Art: Germany]
Catalog Number: 6119 Enrollment: Limited to 15.
Benjamin Buchloh
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Addresses the work of key figures of post-war art in Germany, under the perspective of different, yet complementary conflicts: avantgarde and neo-avantgarde, artistic practices and spectacle culture, aesthetics of repression, trauma and commemoration.
Note: Expected to be given in 2013–14.

History of Art and Architecture 274k. Russian and Soviet Avant-Garde
Catalog Number: 98835 Enrollment: Limited to 12.
Maria Elizabeth Gough
*Half course (fall term). M., 3–6. EXAM GROUP: 8, 9*
A central preoccupation of later aesthetic theory and the history of art has been the precise nature of the relationship between the work of art and everyday life. This seminar focuses on the initial embrace of, and later assault on, orthodox modernism’s faith of art as an autonomous institution by the constellation of movements known collectively as the Russian and Soviet Avant-Gardes

*History of Art and Architecture 275w. The Thing*
Catalog Number: 8955 Enrollment: Limited to 14.
*Jennifer L. Roberts*
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*
Investigates the conundrum of "thingness" in art history, introducing theoretical frameworks for interpreting everything from teapots to minimal sculpture. Interrogates forms of exchange - economic, libidinal, aesthetic, historical- that objects invite (or refuse).

*History of Art and Architecture 275x. Aesthetic Theories from Weimar to Adorno - (New Course)*
Catalog Number: 71413 Enrollment: Limited to 12.
*Benjamin Buchloh*
*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*
The seminar addresses the changing aesthetic theories that emerged during the Weimar Republic and its aftermath in exile, in the work of some of the key philosophers and art historians, from Georg Lukacs, to Siegfried Kracauer, from Carl Einstein to T.W. Adorno and Aby Warburg.

*History of Art and Architecture 275z. Meyer Schapiro: Seminar*
Catalog Number: 87868 Enrollment: Limited to 12.
*Henri Zerner*
*Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18*
Meyer Schapiro’s contributions go from early Christian art to the 20th century. This towering figure of art history explored a wide range of methodological issues. We will explore his intellectual journey and his relevance today.
*Note: Expected to be given in 2013–14.*

*History of Art and Architecture 276k. Frameworks in the Humanities: The Art of Looking (Graduate Seminar in General Education) - (New Course)*
Catalog Number: 15858
*Robin E. Kelsey and Jennifer L. Roberts*
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on "The Art of Looking," by addressing questions such as the distinction between seeing and looking and, ultimately, between sense and sensibility.
*Note: The seminar will design and develop a General Education course on these themes for undergraduates.*

*History of Art and Architecture 277k. The Contemporary*
Catalog Number: 29579 Enrollment: Limited to 14.
Carrie Lambert-Beatty
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
Graduate seminar exploring the intersection of the field of art history with the globalized art world. What is "contemporary art" - in theory, in practice, and in history?

[*History of Art and Architecture 277s. Circa 1970]*
Catalog Number: 2286 Enrollment: Limited to 12.
Carrie Lambert-Beatty
Half course (spring term). Th., 1–3.
Investigation of US artistic production and discourse from the early 1970s, with emphasis on the rubric of the “politicization of the avant-garde” and the periodization of the 60s and 70s. Comparative looks at Europe and Latin America.
Note: Expected to be given in 2013–14.

[History of Art and Architecture 277z. 1960’s Technical Reproductions: Prints, Photos, Books]
Catalog Number: 22567 Enrollment: Limited to 12.
Henri Zerner and Benjamin Buchloh
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
The 1960s saw a revival of printmaking among avant-garde artists; photographic images invaded painting itself (Hamilton, Warhol, Richter); ‘reproductive’ media assumed a central role in the production of art. Will examine the significance of these phenomena.
Note: Expected to be given in 2013–14.

**History of Art and Architecture 280p. Voices in Chinese Painting - (New Course)**
Catalog Number: 33617 Enrollment: Limited to 12.
Eugene Wang
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Seminar explores the "voice" in Chinese paintings from the eleventh- through eighteenth centuries. The goal is to 1) test the validity of transposing "lyrical voice" to the study of painting and 2) formulate a methodology of historicizing pictorial rhetoric by considering both textual cues and material medium while favoring neither.

**History of Art and Architecture 281v. The Reception of Chinese Paintings in Japan - (New Course)**
Catalog Number: 29588 Enrollment: Limited to 12.
Stephen L. Little
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
The seminar will explore the history of collecting Chinese paintings in Japan, focusing on the appropriation of Chinese paintings as artistic models and symbols of social and political status from the 13th through 20th centuries.

[History of Art and Architecture 283m. Four Topics in Chinese Art History]
Catalog Number: 21239 Enrollment: Limited to 12.
Eugene Wang
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Seminar covers four topics in Chinese art history: early cosmography, Song Buddhist art, paintings during the Ming-Qing transition, and early-Republican art design. Presentations by participants in their own areas will anchor the discussion.

*Note:* Expected to be given in 2013–14.

[History of Art and Architecture 286s. Japanese Sculptural Icon: Seminar]
Catalog Number: 94069 Enrollment: Limited to 12.
Yukio Lippit
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
This seminar examines major works of Japanese sculpture in light of recent research on materiality, sculptural process, interred objects, ritual, architectural meaning, conservation, interregionalism, kami worship, the Buddhist sculptor, and comparative theories of the icon.

*Note:* Expected to be given in 2013–14.

Catalog Number: 32694 Enrollment: Limited to 12.
Yukio Lippit
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
This seminar explores the conditions of artistic production in early modern Japan through the life and remarkable bird-and-flower paintings of the Kyoto artist, Ito Jakuchu (1716-1800).

*Note:* Expected to be given in 2013–14.

[*History of Art and Architecture 291r. Topics in Pre-Columbian and Colonial Art*]
Catalog Number: 2306 Enrollment: Limited to 12.
Thomas B. F. Cummins
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Topics to be determined in consideration of interests of students.

*Note:* Expected to be given in 2013–14.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 40. Monuments of Islamic Architecture]

[Aesthetic and Interpretive Understanding 44. Arts of Asia]

[Aesthetic and Interpretive Understanding 46 (formerly Literature and Arts B-49). Modernisms 1865–1968]

[African and African American Studies 174. The African City]

[Culture and Belief 21 (formerly Foreign Cultures 93). Pathways through the Andes—Culture, History, and Beliefs in Andean South America]

[Culture and Belief 30. Seeing is Believing: A History of Photography]

[*History 84c. Confronting Objects/Interpreting Culture: Interdisciplinary Perspectives on North America*]

[History of Science 215r. Science and Culture in Medieval and Early Modern Europe: Seminar]

[Japanese History 265. The Muromachi Period: Culture and Context]

[Japanese Literature 124. The Tale of Genji in Word and Image]
[Japanese Literature 133. Gender and Japanese Art]

*Medieval Studies 250. At Cross Purposes: The Crusades in Material Culture - (New Course)


[*Visual and Environmental Studies 104. Culture Jam: Art and Activism since 1989: Seminar]*

Visual and Environmental Studies 170 (formerly 174c). Film and Photography, Ontology and Art

[Visual and Environmental Studies 172b (formerly 173t). Contemporary Film Theory]

**Visual and Environmental Studies 181. Frames of Mind: Film Theory**

[*Visual and Environmental Studies 182. Film Architectures: Seminar]*

Visual and Environmental Studies 184. Imagining the City: Literature, Film, and the Arts

*Visual and Environmental Studies 185x (formerly *Visual and Environmental Studies 285x). Visual Fabrics: Art, Media, Materiality Seminar*

*Visual and Environmental Studies 271. Proseminar in Film and Visual Studies: Theory*

**Graduate Courses of Reading and Research**

*History of Art and Architecture 300. Reading and Research*
Catalog Number: 5716


Individual work in preparation for the General Examination for the PhD degree or, by arrangement, on special topics not included in the announced course offerings.

*History of Art and Architecture 310a (formerly *History of Art and Architecture 310). Methods and Theory of Art History*
Catalog Number: 7879 Enrollment: Limited to 14.

Maria Elizabeth Gough 6716

Half course (fall term). Tu., 12–2.

Note: Limited to incoming graduate students.

Catalog Number: 47391 Enrollment: Limited to 14. Limited to first-year graduate students.

Maria Elizabeth Gough 6716
2012-2013 Previous Courses of Instruction

**Half course (spring term).**
A series of team-taught workshops designed to sharpen skills in the observation, analysis, and historical interpretation of works of art and architecture.

*History of Art and Architecture 399. Direction of Doctoral Dissertations*
Catalog Number: 6575

*Note:* May not be counted toward course requirements for the PhD degree.

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**History of Science**

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of the History of Science

Anne Harrington, Professor of the History of Science (*Chair and Director of Undergraduate Studies*)

Soha Hassan Bayoumi, Lecturer on the History of Science

Allan M. Brandt, Amalie Moses Kass Professor of the History of Medicine in the Faculty of Medicine, and Professor of the History of Science in the Faculty of Arts and Sciences (*on leave 2012-13*)

Janet Browne, Aramont Professor of the History of Science, Harvard College Professor (*on leave 2012-13*)

Jimena Canales, Associate Professor of the History of Science

Alex Csiszar, Assistant Professor of the History of Science

Peter L. Galison, Joseph Pellegrino University Professor

Jean-François Gauvin, Lecturer on the History of Science

Jeanne Marie Haffner, Lecturer on the History of Science

Evelynn M. Hammonds, Barbara Gutmann Rosenkrantz Professor of the History of Science and of African and African American Studies, Dean of Harvard College

David Shumway Jones, A. Bernard Ackerman Professor of the Culture of Medicine

Chin Jou, Lecturer on the History of Science
Dong Won Kim, Visiting Professor of the History of Science
Shigehisa Kuriyama, Reischauer Institute Professor of Cultural History
Rebecca M. Lemov, Associate Professor of the History of Science (Director of Graduate Studies)
Elizabeth Lunbeck, Visiting Professor of the History of Science
Aaron Pascal Mauck, Lecturer on Social Studies
Bruce T. Moran, Visiting Professor of the History of Science
Katharine Park, Samuel Zemurray, Jr. and Doris Zemurray Stone Radcliffe Professor of the History of Science (on leave 2012-13)
Christopher James Phillips, Lecturer on the History of Science
Sarah S. Richardson, Assistant Professor of the History of Science and of Studies of Women, Gender, and Sexuality (on leave 2012-13)
Hannah Roosth, Assistant Professor of the History of Science
Mark Schiefsky, Professor of the Classics
Steven Shapin, Franklin L. Ford Professor of the History of Science (on leave fall term)
Adelheid Voskuhl, Associate Professor of the History of Science (on leave 2012-13)

**Other Faculty Offering Instruction in the Department of the History of Science**

Owen Gingerich, Professor of Astronomy and of the History of Science, Emeritus
Erwin N. Hiebert, Professor of the History of Science, Emeritus
Gerald Holton, Mallinckrodt Professor of Physics and Professor of the History of Science, Emeritus
Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies at the John F. Kennedy School of Government (Kennedy School)
Everett I. Mendelsohn, Professor of the History of Science, Emeritus
Martha L. Minow, Jeremiah Smith, Jr. Professor of Law (Law School)
Robb Moss, Senior Lecturer on Visual and Environmental Studies
Antoine Picon, G. Ware Travelstead Professor of the History of Architecture and Technology (Design School)
Scott Harris Podolsky, Assistant Professor of Global Health and Social Medicine (Medical School)
Ahmed Ragab, Richard T. Watson Assistant Professor of Science and Religion (Divinity School)
Charles E. Rosenberg, Ernest E. Monrad Professor of the Social Sciences, Emeritus
Jeffrey Schnapp, Professor of Romance Languages and Literatures (on leave spring term)
Jonathan L. Zittrain, Professor of Computer Science

**Affiliates of the Department of the History of Science**

Steven E. Hyman, Professor of Stem Cell and Regenerative Biology and Harvard University Distinguished Service Professor

The Department of the History of Science oversees the undergraduate concentration in History and Science and provides the degree of AM and PhD to properly qualified graduate students. The Department also offers instruction in the history of science to students in other fields.
Primarily for Undergraduates

*History of Science 91r. Supervised Reading and Research
Catalog Number: 1238
Anne Harrington and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Programs of directed reading and research to be conducted by a person approved by the Department.

*History of Science 97. Tutorial — Sophomore Year
Catalog Number: 5235
Anne Harrington
Half course (spring term). Hours to be arranged.
Sophomore tutorial is a hands-on course that introduces students to some of the most exciting and productive questions in the history of science, technology and medicine, while developing critical reading, presentation and discussion skills. Small groups of students will tackle different aspects of a larger theme each week and share discoveries in sessions led by the faculty instructor. The course will be further enhanced by a series of supervised individual projects. Note: Required for undergraduate concentration in History and Science. Students must register for one plenary class session that meets on Mondays from 12:00-1:30 or 3:00-4:30, as well as a weekly section to be arranged.

*History of Science 98. Tutorial — Junior Year
Catalog Number: 1120
Alex Csiszar
Half course (fall term; repeated spring term). Hours to be arranged.
This one-semester junior tutorial is a research-oriented tutorial taken in small groups. Focuses on enhancing research and writing skills through the completion of a directed research paper on subject matter of the student’s interest. Must be taken during the fall semester (except for students not in residence).

*History of Science 99a. Tutorial — Senior Year
Catalog Number: 6619
Christopher James Phillips
Half course (fall term). Hours to be arranged.
Faculty-led seminar and intensive work with an individual advisor, directed towards production of the senior honors thesis. Note: Students are expected to complete a thesis or submit a research paper or other approved project in order to receive course credit. This course must be taken Sat/Unsat.

*History of Science 99b. Tutorial — Senior Year - (New Course)
Catalog Number: 22497
Christopher James Phillips
Half course (spring term). Hours to be arranged.
Faculty-led seminar and intensive work with an individual advisor, directed towards production of the senior honors thesis.
Note: Students are expected to complete a thesis or submit a research paper or other approved project in order to receive course credit. This course must be taken Sat/Unsat.

Cross-listed Courses

[Culture and Belief 11. Medicine and the Body in East Asia and in Europe]
Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
[Culture and Belief 34 (formerly Historical Study A-87). Madness and Medicine: Themes in the History of Psychiatry]
[Culture and Belief 47 (formerly Historical Study B-45). The Darwinian Revolution]
Environmental Science and Public Policy 78. Environmental Politics
Ethical Reasoning 33. Medical Ethics and History - (New Course)
*Freshman Seminar 44t. The Atomic Bomb in History and Culture
Science of Living Systems 12. Understanding Darwinism
[Science of the Physical Universe 17 (formerly Science A-41). The Einstein Revolution]
[United States in the World 13 (formerly Historical Study A-34). Medicine and Society in America]

For Undergraduates and Graduates

History of Science 100. Knowing the World: An Introduction to the History of Science
Catalog Number: 0905
Alex Csiszar
Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13
What are the origins of modern science and of the scientific method? Have the ways of knowing the world of different cultures and societies changed over time? How has scientific knowledge been related to other enterprises such as art, religion, literature, and commerce? We will ask these questions and more through a broad survey of many of the crucial moments in the development of science from the Scientific Revolution of the 17th century to the present day. Topics and figures will include Galileo, evolution, eugenics, the atomic bomb, and the human genome project.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[History of Science 101. Knowledge on the Move: Cultures of Science in the Medieval World]
Catalog Number: 54617
Katharine Park and Ahmed Ragab (Divinity School)
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
Explores the development of scientific ideas and practices in the medieval Middle East and Western Europe, focusing on the circulation of texts, people, and objects. Special attention to religious, intellectual, social, and institutional contexts.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3340.
[History of Science 106. History of Ancient Science]
Catalog Number: 3958
Mark Schiefsky
Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13
An examination of key aspects and issues in the development of ancient science, focusing on
natural philosophy from the Presocratics to Aristotle as well as its relation to early Greek
medicine and mathematics. Some consideration will also be given to the historiography of
natural philosophy within this period.
Note: Expected to be given in 2013–14.

History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
Catalog Number: 81052
Ahmed Ragab (Divinity School)
Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
This course will examine the ways in which medical, religious, cultural, and political discourses
and practices interacted in the medieval and early modern Middle East to create and reflect
multiple understandings of human bodies and sexualities. Special attention to debates on health,
sexuality, and gender and racial identities.
Note: Offered jointly with the Divinity School as 3587. This course, when taken for a letter
grade, meets the General Education requirement for Culture and Belief or the Core area
requirement for Historical Study B. This course fulfills the requirement that one of the eight
General Education courses also engage substantially with Study of the Past.

[History of Science 111. Two Scientific Revolutions: From the Classical Age of Islamic
Sciences to the Scientific World of Early Modern Europe]
Catalog Number: 96159
Ahmed Ragab (Divinity School)
Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
Explores the emergence and consolidation in the Islamic Middle East of a new science and
philosophy constructed in part out of Persian and Greek materials; the consolidation and
development of this science in an Islamic context; and its connections with novel developments
in sixteenth- and early seventeenth-century European science. Attention to cultural context,
including imperial projects, societal transformation, and religious worldviews.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the
Core area requirement for Historical Study B.

[History of Science 112. Health, Medicine and Healing in Medieval and Renaissance
Europe]
Catalog Number: 8576
Katharine Park
Half course (spring term). M., W., (F.), at 10. EXAM GROUP: 3
A survey of medical theory, organization, and practice in the broader context of healing,
including magical and religious healing. Topics include the construction of medical authority and
expertise, the play of sex and gender among healers and patients, the rise of hospitals, and
responses to "new" diseases such as syphilis and plague.
**History of Science 113. Crusades, Plagues and Hospitals: Medicine and Society in the Islamic Middle Ages**
Catalog Number: 59744
Ahmed Ragab (Divinity School)
Half course (spring term). M., W., (F.), at 11; Th., at 1. EXAM GROUP: 4
Surveys the recasting of Islamic medical practices, traditions, and institutions in response to the many health challenges of the turbulent Middle Ages, from the eleventh through the thirteenth centuries, including wars, invasions, and epidemics.
*Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.*

**History of Science 116v. The Worlds of Galileo - (New Course)**
Catalog Number: 37703
Bruce Moran
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
An exploration of Galileo’s life and works through his own writings and those of his modern interpreters. Topics include astronomical discoveries, religious debates, social and personal contexts.

**History of Science 118. Instruments and the Material Culture of Science in Early Modern Europe, 1500-1800 - (New Course)**
Catalog Number: 79069 Enrollment: Limited to 15.
Jean-Francois Gauvin
Half course (fall term). W., 4–6. EXAM GROUP: 9
What is an instrument? Can there be more than one definition? What, if any, is the epistemological difference between Galileo’s telescope and rolling balls? Between Newton’s prisms, Hooke’s microscope, and Réaumur’s thermometer? This course looks at three centuries of science and particularly at its material culture. What makes an “instrument” a “scientific” instrument? Are all instruments “scientific”? How does an object become a scientific instrument? What are the relationships between theory and instruments? Readings and discussion, though at the core of the course, will be supplemented with visits in other Harvard museums and hands-on classes using the Collection of Historical Scientific Instruments.

**History of Science 125. "Moneyball" Nation: Science and the Making of Modern America - (New Course)**
Catalog Number: 49441 Enrollment: Limited to 75.
Christopher James Phillips
Half course (spring term). M., W., F., at 11; section TBA. EXAM GROUP: 4
From selecting a leadoff hitter to conducting randomized clinical trials, decisions and evaluations are increasingly made using mathematical concepts and models. This course surveys the development of--and resistance to--such tools by grounding them in the recent cultural history of the United States. Using sources both scientific and popular, students will explore how and why Americans have come to believe mathematics solves complicated problems, even in seemingly
unrelated moral, political, and social domains.

Note: This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

[History of Science 127. The Making of a Scientist]
Catalog Number: 66306
Christopher James Phillips
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
How does one become a scientist in the modern world? What are the conventions of scientific practice and how are they mastered? This course explores training in the sciences by combining an historical examination of key pedagogical sites and episodes with a study of Harvard’s own undergraduate program of science education. By looking at the tools, theories, and practices involved in the formation of scientists, we explore the nature of the scientific enterprise and of the intellectual and moral shaping of the men and women who participate in it.

[*History of Science 134. Nature on Display: Conference Course]
Catalog Number: 4987 Enrollment: Limited to 15.
Janet Browne
This conference course is run as an advanced seminar for undergraduates. We explore the way that living beings were collected, displayed, and discussed, from the 18th century to today. This means we look carefully at the different places in which natural history could be encountered in the past, such as museums, zoos, botanical gardens, marine stations, parks, and reserves, circuses and shows. It offers an opportunity to engage with some current issues in historical research, notably popular science and the material culture and ‘spaces’ of science. The course hopes to enlarge your understanding of the complex relations between display, entertainment, and knowledge. A visit to the Museum of Comparative Zoology is an integral part of our studies.

Note: Expected to be given in 2014–15.

History of Science 135. From Darwin to Dolly: A History of the Modern Life Sciences - (New Course)
Catalog Number: 58347
Sophia Roosth
Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13
This course surveys the history of modern biology, from the nineteenth century to now. Drawing on primary sources in biology, as well as readings from historians and anthropologists of science, students will be introduced to major themes and questions in the history of the modern life sciences. Topics include theories of natural selection, genetics, eugenics, genomics, ecology, molecular biology, artificial life, and biotechnology. Students will explore questions such as: what has “life” meant at different historical moments? What approaches have life scientists taken to investigating life — from cataloging to experimenting to making new living things? How have notions of “diversity” shaped biology, from Enlightenment taxonomies of nature to modern-day efforts at conserving biodiversity?

History of Science 136. History of Biotechnology
Catalog Number: 58601
What becomes of life when researchers can materially manipulate and technically transform living things? This course historically investigates biotechnology in the twentieth and twenty-first centuries, paying attention to how efforts to engineer life are grounded in social, cultural, and political contexts. Topics include reproductive technologies, genetic engineering and cloning, synthetic biology and bioinformatics, stem cells, intellectual property, and biosafety and biosecurity. Students will explore themes of ownership, personhood, biocitizenship, and biocapital by reading and discussing historical and anthropological accounts of biotechnology, as well as primary scientific publications, science fiction, and legal cases.

[History of Science 138. Sex, Gender, and Evolution]
Catalog Number: 30321
Sarah S. Richardson
Half course (spring term). Tu., Th., at 10. EXAM GROUP: 12
Evolutionary theories of sex and gender and central controversies in human evolutionary biology from Darwin to the present. Topics include debates over the theory of sexual selection and the evolutionary basis of monogamy, sexual preference, physical attraction, rape, maternal instinct, and sex differences in cognition. Readings: primary texts and historical, philosophical, and feminist analyses.
Note: Expected to be given in 2013–14.

[History of Science 139. The Postgenomic Moment]
Catalog Number: 81843
Sarah S. Richardson
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Joining "postgenomic" assessments of the genome projects, this seminar examines the history and contemporary practice of genomics from a multidisciplinary perspective. Topics include the role of technology, government funding, private industry, and race, gender, and nationality in the historical development of genomics, the ways in which genomic research challenges traditional conceptions of biology and science, and the implications of emerging trends such as direct-to-consumer genomics and whole-genome sequencing.
Note: Expected to be given in 2013–14.

History of Science 142. History and Politics of the American Obesity Epidemic - (New Course)
Catalog Number: 27547
Chin Jou
Half course (fall term). M., W., (F.), at 10: . EXAM GROUP: 3
Obesity has become a leading public health concern in the industrialized West (and increasingly in other parts of the world). Rates of obesity in the United States have doubled in adults and tripled in children since 1980. How did this happen? And why is the obesity epidemic controversial? What does looking at the history and politics of the obesity epidemic reveal about broader issues of health and society throughout the twentieth-century United States? This course will illuminate these questions as we survey the trajectory of obesity from many dimensions since the beginning of the twentieth century.
History of Science 146. Introduction to Women’s Bodies in Medicine - (New Course)
Catalog Number: 57761
Chin Jou
Half course (spring term). M., W., (F.), at 10; W., at 1; Th., at 1. EXAM GROUP: 3
This course examines: 1) the evolution of medical and scientific discourse on women’s bodies, and the social and political developments that have informed those discussions; 2) the ways in which classifications and diagnoses of various pathologies have been gendered; and 3) the surveillance of women’s bodies via various screening measures. Specific course topics include: the history of hysteria, eating disorders, women’s representation in clinical trials, the HPV vaccine, contraception, and cosmetic surgery.

History of Science 148. History of Global Health
Catalog Number: 21054
Aaron Pascal Mauck
Half course (spring term). Tu., Th., at 10; Th., at 3. EXAM GROUP: 12
A survey course exploring the interrelated histories of public health, international health, and global health from the 19th to the 21st centuries, with attention to the relationship between Western and non-Western forms of scientific practice and health systems. This course will trace the role of health and medicine in mediating the relationships between metropolis and colony, state and citizen, North and South, public welfare and private interest, research practices and human subjects, the commodification of health and the body, and human rights discourse. The course will be divided chronologically into four parts, tracing imperial health formations in the long 19th century, the nascent internationalism of the interwar period, the construction of bureaucracies of development in the postwar and postcolonial era, and configurations of public- and private-sector actors in late 20th and early 21st century global health practices.
Note: This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[History of Science 150. History of the Human Sciences]
Catalog Number: 0135
Rebecca M. Lemov
Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
Examination of the growth and development of social sciences such as sociology, anthropology, psychoanalysis, psychology, political science, and economics from the Enlightenment to the present. Innovators devised these fields to provide new, scientific ways to gain insight into age-old philosophical and religious questions, such as, What is the nature of the "self" or the "soul"? What binds human beings to one another? What is free will? What are the limits of social control, behavioral engineering, and the possible reach of techniques for adjustment and manipulation?
Note: Expected to be given in 2013–14.

[*History of Science 152. Filming Science]
Catalog Number: 8254 Enrollment: Limited to 12.
Peter L. Galison and Robb Moss
Half course (fall term). M., 1–3, W., 1–4. EXAM GROUP: 6, 7, 8
Examination of the theory and practice of capturing scientific practice on film. Topics will
include fictional, documentary, informational, and instructional films and raise problems emerging from film theory, visual anthropology and science studies. Each student will make and edit short film(s) about laboratory, field, or theoretical scientific work.

Note: Expected to be given in 2013–14.

[History of Science 153. History of Dietetics]
Catalog Number: 1409 Enrollment: Limited to 35.
Steven Shapin
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
A survey of the relationships between medical expertise and human eating habits from Antiquity to the present, giving special attention to the links between practical and moral concerns and between expert knowledge and common sense.

Note: Expected to be given in 2013–14.

History of Science 157. Sociology of Science
Catalog Number: 2434
Steven Shapin
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
An introduction to a series of sociological topics concerning the scientific role, the scientific community, and scientific knowledge that are of special interest to historians. What are the social conditions for the institutionalization of science and for the support of the scientific role? What are the possibilities for a historical sociology of scientific knowledge? What social pressures have historically been exerted on our overall understanding of science and its relations with society?

Note: Expected to be given in 2013–14.

[History of Science 162. Science in the Enlightenment]
Catalog Number: 7570
Adelheid Voskuhl
Half course (spring term). W., 4–6. EXAM GROUP: 9
What is the relationship between science and the period commonly referred to as the Enlightenment (ca. 1685-1815)? We will examine scientific theory, experimentation, and observation in the multiple contexts of social, philosophical, intellectual, and material cultures of the Enlightenment in Europe and North America. The course will explore the connections between Enlightenment science, technology, and engineering with the Industrial Revolution, Newtonianism, and the eventual reactions to Enlightenment ideals of reason and rationality.

Note: Expected to be given in 2014–15.

[History of Science 164. Sense and Scientific Sensibility: Beyond Vision, From the Scientific Revolution to Now]
Catalog Number: 35633
Sophia Roosth
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Scientific inquiry is often considered an endeavor pursued using one’s sense of vision: scientists peer into microscopes and telescopes, and stare at graphs, diagrams, and computer screens. But on what other senses do scientists rely? Do they also gather data using senses of hearing, smell, taste, and touch? How are the senses technologically mediated, and how do researchers evaluate
sensory evidence? To address such questions, this course combines readings in the history and anthropology of science with classic primary sources.

Note: Expected to be given in 2014–15.

**[History of Science 165. The Scientific Revolution]**
Catalog Number: 71921 Enrollment: Limited to 15.

*Alex Csiszar*

*Half course (spring term). W., 2–4.*

When, where, and how did modern science come into being? Many historians and philosophers have looked to Europe in the 16th and 17th centuries to answer these questions. What it meant to learn about the natural world, even what nature was understood to be, underwent so many radical changes during this period that it became known as the Scientific Revolution. This seminar will examine the diverse meanings that have been given to this revolution. Topics will include the experimental method, the nature of belief, the role of communications media, instruments, gender, and natural history. There will be several opportunities for hands-on work with instruments, books, and prints housed in the Collection of Historical Scientific Instruments, Houghton Library, and the Sackler Museum.

Note: Expected to be given in 2014–15.

**History of Science 166. "What is Enlightenment?: Science, Religion, and the Making of Modernity - (New Course)**
Catalog Number: 83424

*Soha Hassan Bayoumi*

*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*

From Immanuel Kant’s answer to this question in 1784 to Michel Foucault’s engagement with the same question and answer in 1984, two centuries had passed and a lot of water had flown under the bridge. From the inception of its ideals in the Anglo-Saxon world in the seventeenth century at the hands of Spinoza, John Locke and Isaac Newton, to its development in France in the eighteenth century by Voltaire, Montesquieu and Rousseau and culmination with the writings of Immanuel Kant, the Enlightenment developed into an important intellectual movement which helped shape modernity and its repercussions in the contemporary world. This course will trace the history of Enlightenment in primary sources, enriched by a collection of secondary readings, and will explore contemporary reflections on Enlightenment from various schools of thought ranging from Marxism to feminism and from postmodernism to conservatism. The course will address the themes of reason and rationality, science and knowledge, religion and religious institutions, tolerance and intolerance, ethics and morality.

Note: Offered jointly with the Divinity School as 3302.

**History of Science 174. Critical Experiments in the Human Sciences**
Catalog Number: 1750

*Rebecca M. Lemov*

*Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4*

This course focuses on high-impact experiments - among them, the Milgram "Obedience" experiments and the Stanford Prison Experiment - carried out in the twentieth-century human sciences by anthropologists, sociologists, social psychologists, and/or experimental psychologists. Many dreamed of a "technology of human behavior" and conducted experiments
toward this end. What were the results, and how do they continue to affect our thinking and daily lives today?

**[History of Science 176. Brainwashing and Modern Techniques of Mind Control]**
Catalog Number: 76277  
_Rebecca M. Lemov_  
_Half course (spring term). M., W., F., at 10. EXAM GROUP: 3_  
This course examines the phenomenon of "brainwashing" as a modern set of techniques that can apparently force a subject radically to alter her beliefs against her will. The Cold War roots of 'brainwashing' - both the myth and the reality -- lie in the politics of twentieth-century anti-Communism and the deeper fear that people’s most strongly held thoughts, ideas, and ideological commitments could be vulnerable to powerful infiltration. In order to understand the dynamics of this process we will examine case studies beginning with the Korean War-era emergence of the term ‘brainwashing’, the American interdisciplinary science of "coercive persuasion" that arose in response, and successive waves of technological, political, and sociocultural developments. We will also look at how brainwashing and analogous persuasive techniques may operate among larger groups, crowds, organizations, and mass societies.  
*Note:* Expected to be given in 2013–14.

**History of Science 180. Science, Technology, and Society in Modern East Asia**  
Catalog Number: 5317  
_Dong Won Kim_  
_Half course (spring term). Tu., Th., at 10. EXAM GROUP: 12_  
This course aims to survey the history of science and technology in East Asian countries—China, Japan and Korea—since the late 19th century. It will emphasize the mutual influence between science & technology and society to answer how they become major industrial powers in the 21st century.

**[History of Science 183. Democracy and Technology]**  
Catalog Number: 47674  
_Adelheid Voskuhl_  
_Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4_  
What is the relationship between technology and politics in global democracies? This course explores various forms of technology, its artifacts and experts in relation to government and political decision-making. Does technology "rule" or "run" society, or, should it? How do democratic societies balance the need for specialized technological expertise with rule by elected representatives? Topics will include: industrial revolutions, factory production and consumer society, technological utopias, the Cold War, state policy, colonial and post-colonial rule, and engineers’ political visions.  
*Note:* Expected to be given in 2013–14.

**History of Science 185 (formerly History of Science 282). Communicating Science: From Print Culture to Cybersocieties**  
Catalog Number: 20399 Enrollment: Limited to 15.  
_Alex Csiszar_  
_Half course (spring term). W., 2–4. EXAM GROUP: 7, 8_
Science doesn’t just happen in the lab. Scientific results have to be communicated among scientists, and to the public. This course investigates the ways in which scientific knowledge circulates, and pays special attention to how new communications media have shaped knowledge-in-the-making. Topics will include the history of scientific genres (letters, encyclopedias, periodicals), popular science, peer review, intellectual property, and new information technologies. Selected classes will take place in Houghton Library.

[History of Science 186. Technology in the Social World]
Catalog Number: 2147
Adelheid Voskuhl
Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4
What role does technology play in the social world? This course explores a variety technological systems in social and historical contexts in Europe, North America, Africa, and Asia between 1300 and 2010. Topics include warfare, agriculture, communication technologies, transportation, consumerism, urbanization, and colonization. Special emphasis on the interrelations between technological artifacts and other forms of "cultural production" such as government, commerce, philosophy, and art.
Note: Expected to be given in 2013–14.

[History of Science 190. Science Facts and Science Fictions]
Catalog Number: 28387
Hannah Roosth
Half course (spring term). Tu., Th., at 11.
This course uses science fiction as a lens through which to view the history of science and technology. By reading sci-fi literature (including novels and short stories by Shelley, Wells, Verne, and Butler, as well as more recent works by Heinlein, Asimov, Le Guin, Gibson, and Atwood) and viewing sci-fi films, this course asks how science is fictionalized, and what such representations tell us about science as an enterprise that melds present contexts with futurism and fantasy. Topics include: time travel, utopias and dystopias, other worlds, artificial intelligence, robotics, alien life.
Note: Expected to be given in 2013–14.

*History of Science 193. History and Technology of Food Production in Modern America - (New Course)*
Catalog Number: 42654 Enrollment: Limited to 15.
Chin Jou
Half course (fall term). Th., 4–6. EXAM GROUP: 18
For much of the twentieth century, America has enjoyed a secure, reliable food supply. To be sure, Americans’ access to food and the quality of the food they consume vary widely. But food is generally available. Whether found in supermarkets, farmer’s markets, convenience stores, or restaurants of every variety, there is an abundance of food and a surfeit of choices. How did this come to be? How did high-yield agriculture develop? How did processed foods find their way to store shelves? To illuminate these questions and more, we will examine the history, technology, and politics of agricultural production throughout the twentieth century. We will also consider contemporary food production practices and ethical dilemmas about how food is produced.
Course readings will cover how food has been cultivated, manufactured, and distributed, as well as the human labor behind some of these production stages.

**History of Science 196. Justice in Health: Ethics of Public Health in the Contemporary World - (New Course)**
Catalog Number: 92662
Soha Hassan Bayoumi

*Half course (spring term). Tu., 2–4; W., at 12. EXAM GROUP: 16, 17*

Public health is distinctly political. It is a field where moral and political philosophy play a significant role. Contemporary political debates on justice have very often brought up questions of public health and what justice in health means. This course will address central issues in what is often called philosophy of healthcare, investigating how some fundamental questions in this field have been answered and attempting to explore alternative answers to them. These questions include the following: What is health? What is healthcare? Does health enjoy a special moral importance? What is it? Who requires and/or deserves healthcare? Is access to healthcare a fundamental human right? The course will also address some controversial moral and political philosophical questions related to health insurance, reproductive rights and euthanasia.

**History of Science 197. Nature, Environment, and the Understanding of Space - (New Course)**
Catalog Number: 69934
Jeanne Marie Haffner

*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*

Investigations of the natural world have focused on different concepts at different historical moments. In America, for instance, the notion of "wilderness" was most prevalent in the late-nineteenth century; that of "environment" became central in the twentieth; and, from the postwar era to the present, analyses of the inextricability of spatial form and social organization have dominated scholarship and social activism alike. The aim of this seminar is to examine these shifts, exploring how they were employed within particular historical contexts, and to assess their implications for the past, present, and future of environmental movements in Europe and America.

**Cross-listed Courses**

**Classical Studies 165. Medicine in the Greco-Roman World**

*History 1345. The Human Sciences in the Modern West*

*History 1702 (formerly History 1923). Violence, Substances and Mental Illness: African Perspectives: Conference Course*

[*MCB 142. Major Advances in Classical and Molecular Genetics]*

*Sociology 160. Medicine, Health Policy and Bioethics in Comparative and Global Perspective: Conference Course*

*Sociology 180. Law, Science, and Society in America - (New Course)*

*Sociology 190. Life and Death in the US: Medicine and Disease in Social Context*

*Primarily for Graduates*
**History of Science 200. Knowing the World: Studying the History of Science**
Catalog Number: 11825
*Alex Csiszar*
Half course (fall term). Hours to be arranged.
This is the graduate section to History of Science 100, Knowing the World: An Introduction to the History of Science.

[*History of Science 206r. Physical Atomism in Antiquity: Epicurus and Lucretius: Seminar*]
Catalog Number: 2410
*Mark Schiefsky*
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Reading of Epicurus’ *Letter to Herodotus* in Book X of Diogemes Laertius, together with Epicurean atomism in Lucretius’ *De rerum natura* and its criticism in other ancient sources. All readings in translation.
*Note:* Expected to be given in 2013–14.

**History of Science 209. Science, Religion and Culture: Debates, Methods and Controversies**
Catalog Number: 74851
*Ahmed Ragab (Divinity School)*
Half course (fall term). W., 4–6. EXAM GROUP: 9
Critical examination of different methods and theories in history and philosophy of science and STS (Science, Technology and Society studies) along with discussions of a number of tools in the study and history of culture and religion and how they can be utilized in the study of science and religion; away from the conflict/reconciliation paradigms and towards examining the perceived relations and exchanges of science and religion through analyzing paradigms, discourses, traditions and authorities. The course can serve as a methodological introduction to history and philosophy of science and STS. The course is a research workshop with a focus on training and professionalization and an emphasis on methods tools in academic writing and research. Students work on specific projects throughout the semester from topic selection, question formation, to research and writing to produce a piece of academic writing such as research papers, conference papers, articles, book reviews, prospectus, syllabi, etc.
*Note:* Offered jointly with the Divinity School as 3341.

[History of Science 212. The Sciences of Life, Medicine and the Body in Medieval and Renaissance Europe]
Catalog Number: 0500
*Katharine Park*
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Graduate colloquium for students preparing for general examinations in the fields covered by the course, as well as other students wishing to develop a comprehensive picture of the subject through extensive reading of secondary sources.
*Note:* Expected to be given in 2013–14.

[History of Science 215r. Science and Culture in Medieval and Early Modern Europe: Seminar]
Catalog Number: 4568
Katharine Park
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Topic for 2010-11: Utopia in the Age of the Scientific Revolution. Explores the relations
between new forms of scientific knowledge and the new literary genre of the utopian fiction in
sixteenth- and seventeenth-century Europe, including works by More, Palissy, Brahe,
Campanella, Bacon, Cavendish, and Fontenelle.
Note: Expected to be given in 2013–14.
Prerequisite: Some familiarity with the history of early modern European art or science and
reading knowledge of at least one European language in addition to English.

History of Science 216v. Nature Beneath the Skin: Scientific Curiosity in Renaissance
Europe - (New Course)
Catalog Number: 49773
Bruce T. Moran
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
In the sixteenth century the study of the physical world increasingly focused upon hidden
interiors - of bodies, of artifacts, of regions, and of natural objects. The seminar focuses on
themes including rationalities of the body, secrets of nature, occult qualities, local and
indigenous knowledge, new world interiors, and the architecture of constructed spaces.

History of Science 221. Einstein Reversed (Graduate Seminar in General Education) - (New
Course)
Catalog Number: 21014
Peter L. Galison
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
This course explores the history of physics and confronts issues of digital film and internet
development, curriculum design, and IP issues. Students will produce films and develop a
combination of scientific, social scientific, and humanistic assignments.
Note: The seminar will design and develop a General Education course on these themes for
undergraduates.

[History of Science 223. History of the Exact Sciences: Trust, Skepticism, and Objectivity]
Catalog Number: 42293
Christopher James Phillips
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Mathematics is both a grounded cultural practice and a mechanism for creating seemingly
timeless and place-less knowledge; over the last three centuries the discipline has become both
highly esoteric and ubiquitous. This course explores these developments and tensions by
examining the key moments in the history of the exact sciences.

[History of Science 238. Rethinking the Darwinian Revolution: Seminar]
Catalog Number: 9533
Janet Browne
Taking Charles Darwin as a well-documented case study, we will explore the historiography of
evolutionary ideas from 1900 on, covering the political, social, and scientific commitments involved in the concept of a "Darwinian Revolution."

*Note:* Expected to be given in 2014–15.

[History of Science 245. The Changing Concept of Race in Science and Medicine in the United States: From Jefferson to Genomics (Graduate Seminar in General Education)] - *(New Course)*

Catalog Number: 57429

Evelynn M. Hammonds

*Half course* (fall term). Th., 4–6. **EXAM GROUP:** 18

This course explores the history of the concept of "race" as used by biologists, anthropologists, and physicians from the 17th century to the present and social and political responses to the concept of race in these fields.

*Note:* Expected to be given in 2013–14. The seminar will design and develop a General Education course on these themes for undergraduates.

*History of Science 246. History and Anthropology of Medicine and Biology - *(New Course)*

Catalog Number: 19559

David Shumway Jones

*Half course* (spring term). W., 2–4. **EXAM GROUP:** 7, 8

Explores recent historical and anthropological approaches to the study of life in both medicine and biology. Topics include: natural history and medicine before the emergence of biology; the history of heredity and molecular biology; race and medicine in the colonies and the metropole; bioeconomic exchange; old and new forms of biopower at molecular, organismic, and global scales. The seminar trains students to engage in scholarly debates in the humanities, social sciences, and natural sciences about the nature of life, the body, and biomedicine. Co-taught with Professor Stefan Helmreich (MIT Anthropology); the class will meet at Harvard.

[History of Science 247. Current Issues in the History of Medicine: Seminar ]

Catalog Number: 28251

Allan M. Brandt

*Half course* (fall term). M., 4–6. **EXAM GROUP:** 9

Explores new methods for understanding disease, medicine, and society, ranging from historical demography to cultural studies. Topics include patterns of health and disease, changes in medical science and clinical practice, the doctor-patient relationship, health care systems, alternative healing, and representations of the human body. The course will focus on historical problem-framing, research strategies, and writing.

*Note:* Expected to be given in 2014–15.

[History of Science 248. Ethics and Judgment in the History of Science and Medicine]

Catalog Number: 61433

David Shumway Jones

*Half course* (spring term). M., 2–4. **EXAM GROUP:** 7, 8

Examines the tensions felt by historians and physicians between historicizing past ethical behaviors and norms and wanting to pass judgment on past actors and actions. Topics include
contested diseases, controversial therapies, and accusations of unethical research. 
*Note: Expected to be given in 2013–14.*

**History of Science 250. Readings in Women’s Bodies in Medicine - (New Course)**
Catalog Number: 72868
Chin Jou
*Half course (spring term). Th., 4–6. EXAM GROUP: 18*
For graduate students and advanced undergraduates. Topics will be similar to those covered in History of Science 146, "Introduction to Women’s Bodies in Medicine," but with additional readings and a focus on historiography. Students will complete a 20-25 page paper based on original research.

**[History of Science 253. Bioethics, Law, and the Life Sciences ]**
Catalog Number: 4500
Sheila Jasanoff (Kennedy School)
*Half course (spring term). Tu., Th., 10–11:30.*
Seeks to identify and explore salient ethical, legal, and policy issues – and possible solutions – associated with developments in biotechnology and the life sciences.
*Note: Expected to be given in 2013–14. Offered jointly with the Kennedy School as IGA-515. May not be taken for credit by students who have already taken IGA-515 (KSG).*

**History of Science 259. The History of the History of Science**
Catalog Number: 68494
Steven Shapin
*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*
A critical survey of conceptions of the history of science over the past hundred years or so and an interpretative engagement with why what’s been said about science and its history have mattered so much.

**History of Science 261. Ethnography of Science and Technology - (New Course)**
Catalog Number: 21346
Sophia Roosth
*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*
This course surveys monographs in the ethnography of science, both canonical and current. How have the methods and tools of the interpretive social sciences been applied to cultures of science and technology? What is the relation of description to analysis in ethnographies of science? How do such ethnographies approach theory-building and interpretation? Beginning with early work in the sociology of scientific knowledge and laboratory studies, students will read work in feminist science studies, field and environmental studies, multi-sited ethnography, sensory ethnography, and ethnographic accounts of digital worlds. Throughout, pressure will be placed on issues of method, style, and representation.

**History of Science 265. Science in/as/of Culture**
Catalog Number: 43494
Sophia Roosth
*Half course (spring term). M., 4–6. EXAM GROUP: 9*
This seminar introduces students to Science and Technology Studies (STS), an interdisciplinary field seeking to understand the natural sciences as cultural and social practices. STS increasingly draws upon a diverse methodological and analytic toolkit: not only sociology, anthropology, and philosophy, but cultural studies, critical theory, gender, race, and postcolonial studies, and laboratory studies. Each unit in this course combines theories and methods in the social study of science with a series of cross-cutting themes including: proof, controversy, practice, actants and agency, post-humanism. Students will investigate the relation of STS to the History of Science and explore recent trends and theories in STS.

Note: Expected to be given in 2014–15.

[*History of Science 267. Science and Social Thought] - (New Course)
Catalog Number: 10653
Alex Csiszar and Sophia Roosth
Half course (fall term). Hours to be arranged.
How does social theory serve as a toolkit for historians and anthropologists of science? How can we appropriate, reinterpret, extend, or query theory in order to ground and drive our own analyses of scientific practice and culture? This course examines critical history and social theory and its impact on recent studies of science, technology, and medicine. Each unit pairs theoretical and methodological texts with empirical studies in history and ethnography of science that apply those theories. Students will be introduced to classic texts in social and critical theory, including Marx, Weber, Geertz, Foucault, Derrida, and White. Weekly discussion focuses on the relation of empiricism to theory, encouraging students to read theory as a means of generating their own understandings of science and technology.

Note: Expected to be given in 2014–15.

[History of Science 270. Sciences of the Self]
Catalog Number: 58523
Rebecca M. Lemov
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
How social, human and behavioral scientists pursued a science of the self from French-revolution-era theories of the "bourgeois self" to Freud’s insights about hysterics to mid-twentieth-century American theories of "personality" to biological and computational models of the late-twentieth century (e.g., the "quantified self" movement). What is the relationship of self to soul and self to society? Some attention to the historiography of the psychological and social sciences will also be given.

Note: Expected to be given in 2013–14.

History of Science 271. Self as Data - (New Course)
Catalog Number: 72536
Rebecca M. Lemov
Half course (fall term). Th., 10–12. EXAM GROUP: 12, 13
Many scholars have considered how the modern self became an object of expert knowledge, scientific experimentation, and institutional discipline. This seminar focuses on cases, past and present, in which individuals treat their own habits, bodies, moods, and thoughts as objects of scrutiny, analysis, and intervention. Ranging from 19th century diary writing and the Buckminster Fuller Chronofiles to contemporary diet techniques, Benjamin Franklin’s self-
monitoring practices to the Quantified Self movement’s digital data collection apps, the seminar explores what shifting modes of self-tracking, self-care, and self-governance reveal about changing understandings of the self, and how they remake subjectivity.

*Note:* This course will be co-taught with Prof. Natasha Schull (MIT Program in Science, Technology, and Society).

**History of Science 274v. Topics in the History of Psychoanalysis - (New Course)**
Catalog Number: 87975
Elizabeth Lunbeck

**Half course (spring term). Th., 10–12. EXAM GROUP: 12, 13**
An introduction to issues and concepts in psychoanalysis, considered clinically in cultural, historical, and contemporary contexts. Major texts, figures, and controversies from Freud to the present. The course will focus on conceptualizations of theory creation and change, and on research and writing strategies.

*Note:* Open to advanced undergraduates with permission of the instructor.

**History of Science 285 (formerly *History of Science 285a). Science, Power and Politics**
Catalog Number: 5124
Sheila Jasanoff (Kennedy School)

**Half course (fall term). W., 2:10–4. EXAM GROUP: 7, 8**
This seminar introduces students to the major contributions of the field of science and technology studies (STS) to the understanding of politics and policymaking in democratic societies.

*Note:* Offered jointly with the Kennedy School as IGA-513.

**History of Science 286. History of Technology: Reformation to the Present**
Catalog Number: 0767
Adelheid Voskuhl

**Half course (fall term). Hours to be arranged.**
Survey of history of technology during early modern and modern periods in Europe, North America, and Asia. Readings include social and cultural histories of technology, classics in the theory of technological modernity, and primary sources.

*Note:* Expected to be given in 2013–14.

**History of Science 288. History and Philosophy of Technology**
Catalog Number: 6645
Adelheid Voskuhl

**Half course (spring term). Th., 4–6. EXAM GROUP: 18**
Graduate-level seminar on classic and recent influential works in the history and philosophy of technology, covering the early modern, modern, and late modern periods; industrial-technological, information-technological, and bio-technological systems; as well as philosophical accounts from the analytical and the continental traditions. Literature covers authors such as Karl Marx, Martin Heidegger, Jurgen Habermas, Thomas Hughes, Donna Haraway, Donald MacKenzie, David Landes, Hayden White, Emily Thompson, and Ken Alder.

*Note:* Expected to be given in 2013–14.
**History of Science 289. Entangled Objects: Or the Stuff of Science, Culture, and Society**
Catalog Number: 84196 Enrollment: Limited to 15.
Jean-Francois Gauvin
Half course (spring term). W., 4–6. EXAM GROUP: 9
This course focuses on things: from the Indian sari to the iPod. Its aim is to look at objects from a variety of angles (science, anthropology, art, cultural studies) and to investigate what makes them such powerful anchors--actors--of our daily lives. The readings and discussions will provide a strong theoretical background to the final assignment: designing and mounting a temporary exhibit.

**[History of Science 290. Critical History: Curating Images, Objects, Media: Seminar]**
Catalog Number: 62781 Enrollment: Limited to 15.
Peter L. Galison and Jeffrey Schnapp
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Examines recent writings on material culture and collecting as part of development of "Tangible Things": an exhibition drawing from the collections of Harvard museums. Seminar combines critical curatorial work with production of short films.
*Note:* Expected to be given in 2013–14.

**[*History of Science 292. Gravity’s Rainbow: Seminar*]**
Catalog Number: 60535
Peter L. Galison
Half course (full term). W., 2–4. EXAM GROUP: 7, 8
This course focuses on a single, extraordinary work of fiction, Thomas Pynchon’s *Gravity’s Rainbow*. By studying this work we explore Pynchon’s vision of modernity, but also important themes in the history of science and in philosophy. We will grapple with the weaponization of science in the twentieth century and on the one hand, and with clashing accounts of explanation on the other. How does one explain the world of V2 rocket-bombs exploding around London in World War II? Do we learn about the location of future detonations from the ones that come earlier as Pavlov might have had it? Or is the world, at root, inextricably random, with events utterly independent one from the other as Poisson would say? Such reflections on the world--and they extend through identity, love, war, and materiality-- feed back into the very nature of writing itself, and in the final sessions of the seminar, we will turn to literary-philosophical questions such this: How, in the absence of causality and continuity, does narrative itself function? What might be a postcausal (postmodern) novel? Along with Pynchon’s original text, we will read widely in the history of technology, warfare, science, literary theory, and philosophy.
*Note:* Expected to be given in 2013–14.

**[*History of Science 296. The Digital Self*]**
Catalog Number: 74548 Enrollment: Limited to 25.
Peter L. Galison and Martha L. Minow (Law School)
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
Social theory, philosophical texts, and historical works help situate understandings of the human "self"; how do these and other materials shed light on conceptions and experiences of the "self" enacted in new digital technologies including the internet, surveillance, multi-person virtual
games, and virtual realities? With attention to the implications of these new experiences for freedom of expression, theft and other crimes, democratic participation, and consumption, the course will include materials from law, history of science, and political and social theory.

*Note:* Expected to be given in 2013–14.


Catalog Number: 67917

Peter L. Galison, Martha L. Minow (Law School), Jeffrey Schnapp, and Jonathan L. Zittrain

Half course (fall term). M., 1:10–3:10. EXAM GROUP: 6, 7, 8

Harvard is beginning a new initiative to explore the intersection of digital power, digital making and digital interpretation. This is a working seminar designed to explore these questions through a cluster of projects designed to cross theorizing with making. For example: What is the health of the internet and how could we construct ways to measure it? What might the next generation of digital humanities look like as it explores the crossover between digital and physical objects? How can digital filmmaking connect with new forms of interactive design and exhibition?

*Note:* Interested students must complete an application form, which can be found on the course website.

**Cross-listed Courses**

**East Asian Film and Media Studies 200 (formerly East Asian Studies 200). The Uses and Meaning of the New Arts of Presentation**

[H]istory 2462. Readings in the U.S. in the 20th Century: Proseminar]

[Japanese History 260r. Topics in Japanese Cultural History]

[*Studies of Women, Gender, and Sexuality 2010. Science, Nature, and Gender (Graduate Seminar in General Education)]

**Graduate Courses of Reading and Research**

*History of Science 300. Direction of Doctoral Dissertations*

Catalog Number: 3388

Allan M. Brandt 3031 (on leave 2012-13), Janet Browne 5511 (on leave 2012-13), Jimena Canales 5070, Alex Csiszar 2475, Peter L. Galison 3239, Jean-Francois Gauvin 3205, Jeremy Alan Greene 6155, Evelyn M. Hammonds 4545, Anne Harrington 1895, Sheila Jasanoff (Kennedy School) 2248, David Shumway Jones 3111, Shigehisa Kuriyama 5269, Rebecca M. Lemov 5570, Katharine Park 2974 (on leave 2012-13), Scott Harris Podolsky (Medical School) 6984, Ahmed Ragab (Divinity School) 6263, Sarah S. Richardson 6730 (on leave 2012-13), Hannah Roosth 2722, Charles E. Rosenberg 3784, Mark Schiefsky 2354, Steven Shapin 3984 (on leave fall term), and Adelheid Voskuhl 5569 (on leave 2012-13)

*Note:* Under special circumstances arrangements may be made for other instruction in guidance for doctoral dissertations.

*History of Science 301. Reading and Research*

Catalog Number: 5641

Allan M. Brandt 3031 (on leave 2012-13), Janet Browne 5511 (on leave 2012-13), Jimena
Canales 5070, Alex Csizsar 2475, Peter L. Galison 3239, Jean-Francois Gauvin 3205, Owen Gingerich 1159, Jeremy Alan Greene 6155, Evelynn M. Hammonds 4545, Anne Harrington 1895, Erwin N. Hiebert 1187, Gerald Holton 1883, Sheila Jasanoff (Kennedy School) 2248, David Shumway Jones 3111, Shigehisa Kuriyama 5269, Rebecca M. Lemov 5570, Everett I. Mendelsohn 2700, Martha L. Minow (Law School) 2617, Katharine Park 2974 (on leave 2012-13), Antoine Picon (Design School) 4295, Scott Harris Podolsky (Medical School) 6984, Ahmed Ragab (Divinity School) 6263, Sarah S. Richardson 6730 (on leave 2012-13), Hannah Roosth 2722, Charles E. Rosenberg 3784, Mark Schiefsky 2354, Steven Shapin 3984 (on leave fall term), and Adelheid Voskuhl 5569 (on leave 2012-13)

Individual work in preparation for the General Examination for the PhD degree.

*History of Science 302. Guided Research
Catalog Number: 5282
Allan M. Brandt 3031 (on leave 2012-13), Janet Browne 5511 (on leave 2012-13), Jimena Canales 5070, Alex Csizsar 2475, Peter L. Galison 3239, Jean-Francois Gauvin 3205, Owen Gingerich 1159, Jeremy Alan Greene 6155, Evelynn M. Hammonds 4545, Anne Harrington 1895, Erwin N. Hiebert 1187, Gerald Holton 1883, Sheila Jasanoff (Kennedy School) 2248, David Shumway Jones 3111, Shigehisa Kuriyama 5269, Rebecca M. Lemov 5570, Everett I. Mendelsohn 2700, Martha L. Minow (Law School) 2617, Robb Moss 1392, Katharine Park 2974 (on leave 2012-13), Antoine Picon (Design School) 4295, Scott Harris Podolsky (Medical School) 6984, Ahmed Ragab (Divinity School) 6263, Sarah S. Richardson 6730 (on leave 2012-13), Hannah Roosth 2722, Charles E. Rosenberg 3784, Mark Schiefsky 2354, Steven Shapin 3984 (on leave fall term), and Adelheid Voskuhl 5569 (on leave 2012-13)

Through regular meetings with faculty advisor, each student will focus on research and writing with the purpose of developing a publishable research paper.

*History of Science 310hf (formerly *History of Science 310). History of Science Salon
Catalog Number: 1047
Anne Harrington 1895
Half course (throughout the year). Hours to be arranged.

What is history of science about as a discipline and profession? This half-course meets evenings throughout the academic year to introduce first-year graduate students to the range of debates, questions, and research practices currently shaping the field.

Note: The course is required for first year students in the PhD program and students in the AM program in the History of Science. For the purpose of degree requirements for these students, HS 310 fulfills the HS 201 requirement, as HS 201 has been withdrawn.
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Human Evolutionary Biology

David Pilbeam, Henry Ford II Professor of Human Evolution (Acting Chair and Director of Undergraduate Studies)
Meir M. Barak, Lecturer on Human Evolutionary Biology
John C. Barry, Lecturer on Human Evolutionary Biology
Judith F. Chapman, Lecturer on Human Evolutionary Biology
James S Chisholm, Visiting Professor of Human Evolutionary Biology
Peter T. Ellison, John Cowles Professor of Anthropology (on leave 2012-13)
Brenda C. Frazier, College Fellow in Human Evolutionary Biology
Katherine J. Hinde, Assistant Professor of Human Evolutionary Biology
Karen L. Kramer, Visiting Professor of Human Evolutionary Biology
Kristi L. Lewton, Preceptor in Human Evolutionary Biology
Daniel E. Lieberman, Professor of Human Evolutionary Biology, Harvard College Professor (on leave 2012-13)
Susan F. Lipson, Lecturer on Human Evolutionary Biology
Stephanie L. Meredith, Lecturer on Human Evolutionary Biology
Charles L. Nunn, Associate Professor of Human Evolutionary Biology
Meredith W. Reiches, College Fellow on Human Evolutionary Biology
Linda M. Reynard, Lecturer on Human Evolutionary Biology
Maryellen Ruvolo, Professor of Human Evolutionary Biology (Director of Graduate Studies)
Tanya M. Smith, Associate Professor of Human Evolutionary Biology
Noreen Tuross, Landon T. Clay Professor of Scientific Archaeology
Anna G. Warrener, Lecturer on Human Evolutionary Biology
Victoria E. Wobber, Lecturer on Human Evolutionary Biology
Richard W. Wrangham, Ruth Moore Professor of Biological Anthropology

Other Faculty Offering Instruction in the Department of Human Evolutionary Biology

Andrew A. Biewener, Charles P. Lyman Professor of Biology
Stacey A. Combes, Assistant Professor of Organismic and Evolutionary Biology, Associate Professor of Organismic and Evolutionary Biology
George V. Lauder, Henry Bryant Bigelow Professor of Ichthyology and Curator of Ichthyology in the Museum of Comparative Zoology
Michael McCormick, Francis Goelet Professor of Medieval History

Affiliates of the Department of Human Evolutionary Biology

David E. Reich, Associate Professor of Genetics (Medical School)

Human Evolutionary Biology provides a general foundation in human and organismic biology as part of the Life Sciences cluster of concentrations. It addresses why humans and primates are the way they are from an evolutionary perspective. Understanding the biological bases for the behavioral and physical traits that distinguish humans from other primates is one of the great
challenges of modern biology, and is the focus of Human Evolutionary Biology. Students interested in addressing questions about human and non-human primate cognition from the perspective of human evolutionary biology also may pursue a special program of study affiliated with the University-wide Mind, Brain, and Behavior Initiative. For concentration requirements, see the Department of Human Evolutionary Biology website.

**Primarily for Undergraduates**

**Human Evolutionary Biology 91r. Supervised Reading and Research**
Catalog Number: 3631
David Pilbeam
Half course (fall term; repeated spring term). Hours to be arranged.
Special study of selected topics in human evolutionary biology, given on an individual basis and directly supervised by a member of the Human Evolutionary Biology Faculty.
Note: May be taken for a letter grade or Pass/Fail. Signature of faculty supervisor required.

**Human Evolutionary Biology 97. Sophomore Tutorial in Human Evolutionary Biology**
Catalog Number: 2205
David Pilbeam
Half course (spring term). Hours to be arranged.
An introduction to the issues and methods of human evolutionary biology, focusing on evolutionary theory, the concept of adaptation, and their application to human evolution. Weekly readings and discussions, with biweekly writing assignments that integrate major course themes.
Note: Required of and limited to Human Evolutionary Biology concentrators.

**Human Evolutionary Biology 99a. Tutorial—Senior Year**
Catalog Number: 2840
David Pilbeam
Half course (fall term). Hours to be arranged.
Research and writing of the Senior Thesis.
Note: Limited to honors candidates. Signature of the faculty adviser required.

**Human Evolutionary Biology 99b. Tutorial - Senior Year**
Catalog Number: 61326
David Pilbeam
Half course (spring term). Hours to be arranged.
Research and writing of the Senior Thesis.
Note: Limited to honors candidates. Signature of the faculty adviser required.

**Cross-listed Courses**

**Freshman Seminar 44s. Neanderthals and Human Evolutionary Theory**
Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution
Life Sciences 2. Evolutionary Human Physiology and Anatomy
[Science of Living Systems 21. Evolutionary Medicine]

For Undergraduates and Graduates

*Human Evolutionary Biology 1210. Research in Comparative Biomechanics: Seminar*
Catalog Number: 11259
Andrew A. Biewener, Stacey A. Combes, George V. Lauder, and Anna G. Warrener
Half course (spring term). Hours to be arranged.
Introduces students to experimental techniques used to investigate the structure and physiology of animals. Each instructor offers research projects that are undertaken in their laboratory (limit 5 students per instructor). Students meet to introduce their project, discuss their work and progress, and to present their final results. An extensive commitment of time in the laboratory is required. Grades are based on the work completed, the oral presentation, and a short research paper.
*Note:* Laboratory safety session required.
*Prerequisite:* Life Sciences 2 or Organismic and Evolutionary Biology 102 or equivalent preferred.

Human Evolutionary Biology 1310. Hormones and Behavior
Catalog Number: 2265
Judith F. Chapman
Half course (spring term). M., W., F., at 12; sections TBA. EXAM GROUP: 5
An introduction to the interaction between hormones and behavior, emphasizing research in humans. General principles of endocrine physiology are presented. The course then focuses on how hormones affect the brain and body in early development and later in adulthood, and the relationship of hormones to sex and gender. We will explore human reproduction, energy metabolism, mating and sexuality, parental behavior, learning and memory, stress, and dominance interactions.
*Note:* This course is a prerequisite for Human Evolutionary Biology 1418. This course, when taken for a letter grade, meets the Core area requirement for Science B.

[Human Evolutionary Biology 1312. Human Sexuality: Research and Presentation Seminar]
Catalog Number: 5008 Enrollment: Limited to 15.
Judith F. Chapman
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
An examination of human sexuality from a scientific perspective. Students will read and present primary scientific literature that highlights current research on a variety of topics including: sexual development, gender identity, sexual orientation, cross cultural variations in mating systems, promiscuity, the evolution of monogamy, sexual attraction, sexual communication, including an exploration of the existence of human pheromones, libido and sexual dysfunction.
*Note:* Expected to be given in 2013–14.

*Human Evolutionary Biology 1313. Stress: Research and Presentation Seminar*
Catalog Number: 27108 Enrollment: Limited to 15.
Judith F. Chapman
Half course (fall term). Th., 2–4. EXAM GROUP: 17
An examination of stress from a scientific perspective with a focus on stress research in mammals, especially primate and humans. A writing and speaking intensive seminar that will explore the basics of the stress response, physiological effects of the stress and factors that affect stress responsiveness, such as perinatal and early life effects, social support, outlets for frustration and coping skills. The relationship between stress and disease will also be explored. Scientific studies of the effectiveness of modalities of stress reduction will also be discussed. Students will present primary scientific literature that highlights current research on a variety of topics in the field.

**Human Evolutionary Biology 1329, Sex, Love and War: The Evolution of Human Behavior - (New Course)**
Catalog Number: 89352
Richard W. Wrangham and Katherine J. Hinde
Half course (fall term). M., W., 9:30–11. EXAM GROUP: 2, 3
This introductory course is designed to familiarize students with the behavioral ecology of human from an evolutionary perspective. Here we will survey behavioral diversity and consistency across human societies. Moreover, we will gain insights into the evolution of human behavior by exploring the social dynamics of non-human primates. Topics to be covered include cooperation and reciprocal altruism, aggression and warfare, dominance and hierarchy, mating and pair-bonds, parenting, social learning, language and religion.

[Human Evolutionary Biology 1330. Primate Social Behavior]
Catalog Number: 4332
Zarin P. Machanda and Richard W. Wrangham
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
A review of the behavioral interactions in natural primate populations, drawing on experimental, observational, and theoretical studies. Discussion of ecological, physiological, and developmental bases of primate social behavior, with special attention to the evolution of patterns of behavioral interactions among individuals of different age, sex, relatedness, and status. Topics include sexual conflict, sexual selection, and mating systems; care of offspring and other aid-giving; manipulative and cooperative aspects of communication; competition, dominance, and territoriality; and the evolution of social relationships.
*Note:* Expected to be given in 2013–14.

**Human Evolutionary Biology 1333, Primate Disease Ecology and Global Health**
Catalog Number: 8036
Charles L. Nunn
Half course (fall term). Tu., Th., 10–11:30; Th., at 1. EXAM GROUP: 12, 13
Infectious disease plays a major role in the lives of humans, and the same is true of nonhuman primates. This course will explore infectious diseases in humans and nonhuman primates, including emerging infectious diseases. Through a combination of lecture, reading and discussion, we will consider similarities and differences in disease ecology in humans and nonhuman primates, and we will investigate the evolution of parasites, pathogens and primate behavior.
[Human Evolutionary Biology 1335. Behavioral Ecology of Chimpanzees]
Catalog Number: 32284
Zarin P. Machanda
Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8
An advanced seminar on current topics in behavioral ecology research of chimpanzees and bonobos. Topics will include: foraging, dominance, cooperation, adolescence, reproductive strategies, culture, ranging, cognition, molecular ecology, and relationships. We will discuss behavioral flexibility of chimpanzees between different communities across Africa and learn how to collect and analyze behavioral data. We will compare the behavior of chimpanzees and bonobos with that of humans and examine how these species might serve as models for human evolution.
Note: Expected to be given in 2013–14.
Prerequisite: Human Evolutionary Biology 1330 or Science B-29 or permission of instructor.

Human Evolutionary Biology 1352. The Evolution of Human Development - (New Course)
Catalog Number: 31489
James S Chisholm
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
What was the role of development in the evolution of culture? This course provides an introduction to human evolutionary-developmental ("evo-devo") psychology. We will focus on infant development and the evolutionary origin and ontogenetic development of attachment (love) throughout the life cycle. We will also use an evolutionary lens to examine how humans have been able to adapt developmentally to changing social and environmental conditions, and how this ability helps to explain patterns of human behavior today.

Human Evolutionary Biology 1366. Mating Strategies - (New Course)
Catalog Number: 62507 Enrollment: Limited to 15.
Stephanie L. Meredith
Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17
In this advanced seminar, we will examine the selection pressures that drive animals (including the human animal) to make particular mating decisions. We will engage in a broad, comparative exploration of the diversity of mating strategies across the animal kingdom, paying particular attention to primates, in order to ground our understanding of human mating strategies in an evolutionary perspective. Topics to be covered include the evolution of: sex, paternal care, sex-role reversal, social monogamy versus sexual monogamy, sexual coercion, homosexual behavior, and frequency dependent mating strategies.
Note: Human Evolutionary Biology concentrators will have priority, if space is limited.
Prerequisite: Human Evolutionary Biology 97 or Human Evolutionary Biology 1330 or Organismic and Evolutionary Biology 57 or permission of instructor.

Human Evolutionary Biology 1372. Evolution, Motivation, and Culture - (New Course)
Catalog Number: 14945
James S Chisholm
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Human beings represent an evolutionary first. We are the first animal in which information is transmitted through time and space by means of "complex cumulative culture." This
interdisciplinary seminar will examine the role of motivation in the evolution of culture. Drawing on theory and research in human evolutionary biology, anthropology, animal behavior, affective neuroscience, and social-cognitive developmental psychology, we’ll review theory and evidence that our ancestors were naturally selected to want to behave in ways that opened the door for culture to emerge from nature. Students will present primary literature and a final paper. 

Note: No prerequisites but some background in above fields will be helpful.

**Human Evolutionary Biology 1377. Birth**  
Catalog Number: 53113 Enrollment: Limited to 60.  
Meredith W. Reiches  
**Half course (spring term). M., W., at 10, and a weekly section to be arranged. EXAM GROUP: 3**  
This lecture course will explore human birth from the perspective of evolutionary biology, asking: Why is human labor so laborious? What are the nuts and bolts of birth? How do babies "know" when to be born? How do we understand birth in novel selective environments of the modern world? We will cover principles of human evolution, birth in primate relatives and ancestors, research design with laboring women, and the physiology of late pregnancy and birth before examining medical interventions and maternity care policy from historical, functional, and legal perspectives. Guest speakers will offer perspectives from a variety of birth-related professions.  
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief.

*Human Evolutionary Biology 1388. Adolescence*  
Catalog Number: 16698 Enrollment: Limited to 15.  
Meredith W. Reiches  
**Half course (fall term). M., 1–3. EXAM GROUP: 6, 7**  
Puberty, the transition to reproductive maturity, occurs in all sexually reproducing species; adolescence, however, is a human concept encompassing not only physiological but also social, behavioral, and perceptual shifts. This course takes an anthropological, biological, and phylogenetic approach to adolescence, asking: What elements of growth and maturation define adolescence, and is it unique to humans? How do the body’s priorities change? What can we learn by examining those changes in the context of ecological and cultural variation? Texts address human and non-human primate growth and development; social rites of passage; and literary dramatizations of coming of age.

*Human Evolutionary Biology 1393. Human and Non-Human Primate Reproductive Ecology - (New Course)*  
Catalog Number: 17186 Enrollment: Limited to 6.  
Meredith W. Reiches  
**Half course (fall term). Tu., 10–12. EXAM GROUP: 12, 13**  
In this upper-level seminar, we will examine humans and non-human primate reproduction from a life history perspective, using classic papers and emerging research to tackle some of the following questions: What influence does a mother’s developmental environment have on the reproductive success of her offspring? At what point in hominid evolution did human-like reproductive patterns, including concealed ovulation and stacked dependent offspring, emerge? What role do evolutionarily relevant immune challenges like helminths have in energy allocation
to reproduction? A series of short writing assignments will culminate in a synthetic paper composed by the class addressing a shared question.

Prerequisite: Human Evolutionary Biology 1310 or permission of instructor. Basic knowledge of reproductive physiology and ecology and primatology required.

[Human Evolutionary Biology 1405. The Biology of Aging]
Catalog Number: 30624 Enrollment: Limited to 15.
Noreen Tuross

Half course (fall term). W., 2–5. EXAM GROUP: 7, 8, 9

The course will focus on human aging by examining experimental models of aging, mechanisms involved in aging, the role of diet and infection in the aging process and the evolution of the human life span.

Note: Expected to be given in 2013–14.

Prerequisite: Life Sciences 1b, Life Sciences 2 recommended.

[Human Evolutionary Biology 1411. Evolution and Adaptation of the Human Diet]
Catalog Number: 89118 Enrollment: Limited to 30.
Noreen Tuross and Richard W. Wrangham

Half course (spring term). M., W., F., at 11; discussion section TBA. EXAM GROUP: 4

Within and across cultures people adopt widely varying diets, yet as a species, our foods are characteristically human. In this course we ask what is the fundamental nature of the human diet, what constrains it, how people adapt to different diets, and how the human diet evolved from those of our primate ancestors.

[Human Evolutionary Biology 1416. The Neurobiology of Sociality: Seminar]
Catalog Number: 42215 Enrollment: Limited to 15.
Katherine J. Hinde

Half course (spring term). Th., 2:30–5:30. EXAM GROUP: 16, 17, 18

Recent research has illuminated the neural mechanisms underpinning sociality and social behavior in humans and other animals. In this seminar we will discuss publications that address modifications to neural structure and function as a result of behavioral specializations among taxa in relation to their social complexity or among individuals within species as a function of their social condition. This course will emphasize the value of approaching neurobiology from an evolutionary perspective and understanding the selective pressures that have shaped our mind, brain, and behavior.

Note: Expected to be given in 2013–14. Can be taken by Human Evolutionary Biology concentrators as a Junior Research Seminar. Open to graduate students.

Prerequisite: Previous or concurrent registration in Molecular and Cellular Biology 80 strongly recommended.

*Human Evolutionary Biology 1418. Endocrinology and Behavior: Research Seminar
Catalog Number: 1437 Enrollment: Limited to 8.
Susan F. Lipson

Half course (fall term). M., W., (F.), at 11, and a weekly laboratory either M. or W., 2-5. EXAM GROUP: 4

An introduction to laboratory techniques and research design in behavioral endocrinology.
Students conduct pilot research projects.  
*Note:* Preference given to Human Evolutionary Biology concentrators.  
*Prerequisite:* Human Evolutionary Biology 1310 or Life Sciences 2 or with permission of instructor.

**Human Evolutionary Biology 1419. Laboratory Methods in Human Evolutionary Biology - (New Course)**
Catalog Number: 98922 Enrollment: Limited to 12.  
*Linda M. Reynard*  
*Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17*
An introduction to laboratory methods in Human Evolutionary Biology. We will use state-of-the-art equipment and techniques to explore how humans metabolize caffeine, starch, and alcohol. Topics include quantitative pcr and genetic analysis, immunological methods, enzyme kinetics, chromatography, and measurement of isotope ratios in tissues.  
*Prerequisite:* Life Sciences 1 and Life Sciences 1b.

**[Human Evolutionary Biology 1420. Human Evolutionary Anatomy]**
Catalog Number: 6233  
*Tanya M. Smith*  
*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*
How did the human body evolve, and how does it develop, grow and function? An integrative overview of human anatomy and evolution, with a focus on the musculo-skeletal system, and a comparative approach to the evolution of modern anatomy. Additional topics include: bone and tooth development, gross anatomy of the nervous and circulatory systems; comparative limb anatomy; craniofacial growth and development; and the human fossil record.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Life Sciences 2 or Science of Living Systems 16 or with permission of instructor.

**Human Evolutionary Biology 1421. Teeth**
Catalog Number: 8758 Enrollment: Limited to 6.  
*Tanya M. Smith*  
*Half course (fall term). W., 3–5:30. EXAM GROUP: 8, 9*
Teeth are one of the best preserved and most commonly-recovered elements in fossil assemblages. This seminar will focus on ways in which dental remains may inform studies of primate growth and development, ecology, and health. Students will read and discuss current scientific literature, engage in histological studies in the Dental Hard Tissue Laboratory, and conduct pilot research projects.  
*Note:* Preference given to Human Evolutionary Biology junior and senior concentrators.

**Human Evolutionary Biology 1423. Human Origins and Evolution - (New Course)**
Catalog Number: 68044  
*Tanya M. Smith*  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
This course traces evidence for hominin evolution to understand how and why we became human. Readings will cover issues in evolutionary and developmental biology, with an emphasis on the fossil record and comparative data on living primates. Hands-on laboratory sessions will
feature fossils and comparative primate skeletal material to complement the lectures. Students will be challenged to critically evaluate on-going debates in paleoanthropology, and will develop skills in reading primary literature and interpreting formal scientific writing in preparation for student-led debates.

*Note:* Students who have taken Science of Living Systems 16 should not enroll in this course.

**[Human Evolutionary Biology 1435r. Primate Ecology and Evolution]**
Catalog Number: 83093  
*John C. Barry and David Pilbeam*  
Half course (spring term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13  
The course will explore how primates have evolved and adapted to their environments with particular attention given to critical drivers of these adaptations such as food, predation and sexual selection. We will examine both living primates and their fossil ancestors and discuss the different temporal perspectives of "ecological time" and "paleontological time". Topics will include adaptations for food harvesting and processing, life history strategies, sexual dimorphism, locomotion, and grouping patterns.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* None, but Life Sciences 2, Science of Living Systems 16, Human Evolutionary Biology 1420, or Human Evolutionary Biology 1330 would be helpful.

**[Human Evolutionary Biology 1455. Primate Genetics]**  
Catalog Number: 97253 Enrollment: Limited to 15.  
*Amanda S. Lobell*  
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
The last few years have witnessed a revolution in the study of primate biology thanks to newly available genetic data. This seminar integrates genetics with behavior and ecology to consider key topics in primate evolution. Major questions posed by this class include how DNA-based evolutionary relationships provide information about primate anatomy, physiology and behavior; the role of dispersal, paternity, and kinship in structuring primate societies; and the application of behavioral genetics to humans and primates.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Life Sciences 1b. Human Evolutionary Biology 1330 and Human Evolutionary Biology 1463 helpful.

**[Human Evolutionary Biology 1463. Molecular Evolution of the Primates]**  
Catalog Number: 3359  
*Maryellen Ruvolo*  
Half course (fall term). M., 2–5. EXAM GROUP: 7, 8, 9  
Introduction to the primates, emphasizing their molecular evolutionary history and the forces that mold their genomes. Topics include the neutral theory of molecular evolution, molecular clock concept and its applications, evolution of multigene families, relationships between primate morphological and molecular evolution, molecular convergences, evidence for horizontal gene transfer in primate genomes, and evolution of simian and human immunodeficiency viruses, color vision genes.  
*Prerequisite:* Life Sciences 1b.
Human Evolutionary Biology 1490r. Primate Evolution  
Catalog Number: 7376  
David Pilbeam and John C. Barry  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
A lecture/discussion course on primate evolution from a paleontological perspective. Following a survey of major primate groups as adaptive radiations, the hominoid fossil record will be reviewed within the context of the mammalian record, a particular focus being the relationship between adaptive, faunal, and climate change. Systems that can be inferred from the fossil record (for example, positional and foraging behaviors) will be discussed comparatively. Section meetings will focus primarily on the fossil record.  
Note: No final exam; research paper required. Can be taken by Human Evolutionary Biology concentrators as a Junior Research Seminar. Introductory courses in paleoanthropology, evolution, genetics, or anatomy helpful.

Human Evolutionary Biology 1495. The Head - (New Course)  
Catalog Number: 83815 Enrollment: Limited to 12.  
Brenda C. Frazier  
Half course (spring term). M., 2–5. EXAM GROUP: 7, 8, 9  
How and why does the human head look the way it does? How does the head develop, and what is the interplay between this development and how the head evolves? Why are human brains so anomalously large, while our faces are quite small? In this seminar, we will explore the natural history of the head, using the comparative anatomy of our primate relatives as a guide.  
Prerequisite: Life Sciences 2 or Human Evolutionary Biology 1420 or permission of instructor.

Human Evolutionary Biology 1500. Building Babies: Developmental Trajectories from Conception to Weaning  
Catalog Number: 93737 Enrollment: Limited to 8.  
Katherine J. Hinde  
Half course (spring term). W., 2:30–5:30. EXAM GROUP: 7, 8, 9  
Research on human and non-human primate developmental trajectories has grown exponentially among numerous disciplines including evolutionary anthropology, psychobiology, nutrition, behavioral biology, and neuroscience. The seminar will cover the mechanisms, function, and evolution of human and non-human primate development from conception through pregnancy and lactation. Areas of development to be included will be somatic growth, immunology, behavioral/social interactions, neurobiology/cognition/learning, and metabolic processes.

Human Evolutionary Biology 1520. The Biology of Bone - (New Course)  
Catalog Number: 57669 Enrollment: Limited to 12.  
Meir M. Barak  
Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17  
Bones are lightweight, stiff, strong, yet relatively elastic structures that have to do many things: support our body, grow, resist forces, anchor muscles, and house marrow. This seminar will explore how bones grow, function and evolve. Topics included: bone structure, bone histology, bone growth, how bones adapt to loading, and bone diseases. Students will read and discuss key scientific publications on these topics, and do a project involving CT scanning and analysis of bones.
Human Evolutionary Biology 1530, Hominid Paleontology and Evolution
Catalog Number: 52879
David Pilbeam
Half course (fall term). Tu., Th., 10–11:30 and a weekly section. EXAM GROUP: 12, 13
A lecture, discussion, and research course using cast and comparative collections, focusing on important issues in hominid paleobiology: ape ancestors, human ancestors, and early hominin radiations; earliest Homo; neandertals and modern humans; the role of environmental change. Can be taken as a research seminar.
Prerequisite: Life Sciences 2 or Science of Living Systems 16 or Human Evolutionary Biology 1420 or with permission of instructor.

Human Evolutionary Biology 1540, Human Migration - (New Course)
Catalog Number: 68708 Enrollment: Limited to 15.
Noreen Tuross
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
The course will explore human migration at several scales, time depths and data sources, including the movement of humans out of Africa and the complex movements of the first farmers across Europe. We will explore the impacts that climates and disease burden have had on human migrations, and discuss recent movements of people and the reasons for migratory behavior in humans. in addition, a personal migration story will be developed by the class.
Note: Can be taken by Human Evolutionary Biology concentrators as a Junior Research Seminar.

[Human Evolutionary Biology 1565. Theories of Sexual Coercion]
Catalog Number: 1953 Enrollment: Limited to 25.
Richard W. Wrangham and Diane L. Rosenfeld (Harvard Law School)
Half course (spring term). W., 5–7 p.m. EXAM GROUP: 9
Where does interpersonal violence come from? Is it learned? Is it innate? Is it malleable? What are we to make of the gendered difference in the use of violence? What does the study of sexual violence in primates offer to our understanding of its prevalence among humans? In this course, we examine evolutionary perspectives on male sexual coercion in primates and in humans to search for insights into sexual violence among humans. The review of this body of literature offers different analytical methods for questioning the use of sexual violence in our society, helping us identify new ways of preventing its occurrence.
Note: Expected to be given in 2013–14. Offered jointly with Harvard Law School as LAW-47271A.

Human Evolutionary Biology 1940, Science and the Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)
Catalog Number: 51687
Michael McCormick and Noreen Tuross
Half course (spring term). M., 1–3. EXAM GROUP: 6, 7
Examines recent and ongoing discoveries that show how the natural sciences are revolutionizing
understanding of the human past across temporal and geographic boundaries. Topics include how archaeology, history and science illuminate and are illuminated by Jomon Pottery, ancient and medieval coins, silk, climate change, and genomics. Mixes classic classroom, seminar-style teaching with classes held as field-trips to New England museums, landscapes and laboratories.

Cross-listed Courses

History 1940. Science and the Global Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)
*OEB 121a. Research in Comparative Biomechanics: Seminar

Primarily for Graduates

*Human Evolutionary Biology 2312. Current Topics in Human Evolutionary Genetics
Catalog Number: 1175
Maryellen Ruvolo
Half course (spring term). F., 9:30–11. EXAM GROUP: 2, 3
Critical reading of current literature on the genetics of living humans and discussion of evolutionary implications.
Note: Open to first and second year graduate students in Human Evolutionary Biology.

[Human Evolutionary Biology 2313r. Topics in Reproductive Ecology and Life History]  
Catalog Number: 88581 Enrollment: Limited to graduate students in Human Evolutionary Biology.  
Peter T. Ellison  
Half course (fall term). Hours to be arranged.  
A graduate seminar focusing on different contemporary issues in human reproductive ecology and life history evolution. The topic for 2010 will be evolutionary approaches to adolescence.  
Note: Expected to be given in 2013–14.

Human Evolutionary Biology 2430. Behavioral Biology Seminar  
Catalog Number: 3777  
Richard W. Wrangham and Katherine J. Hinde  
Half course (fall term). Hours to be arranged.  
Reading and discussion of current research in the behavioral ecology of humans and nonhuman primates. Emphasis placed on comparative and interdisciplinary approaches.  
Note: Required of entering graduate students in Human Evolutionary Biology. Open to other graduate students. Limited to graduate students.

[Human Evolutionary Biology 2460. Issues in Human Evolution]  
Catalog Number: 1073  
David Pilbeam  
Half course (spring term). W., at 9. EXAM GROUP: 2  
A discussion course for first and second year graduate students in Human Evolutionary Biology. Topics will include origins of hominids, radiation of hominins, origins of the genus Homo, and origins of Homo sapiens.
Note: Expected to be given in 2013–14. To be taken while auditing Science of Living Systems 16.

Cross-listed Course

Graduate Courses of Reading and Research

*Human Evolutionary Biology 3000. Reading and Research
Catalog Number: 99167
Special reading in selected topics under the direction of members of the department.
Note: Consult the appropriate member of the department.

*Human Evolutionary Biology 3001. Reading for General Examination
Catalog Number: 47645
Members of the Department
Individual reading in preparation for the general examination for the doctoral degree.
Note: Restricted to candidates for the doctoral degree and ordinarily to those who have completed at least one year in residence.

*Human Evolutionary Biology 3200. Graduate Seminar in Human Evolutionary Biology
Catalog Number: 31571
David Pilbeam 7224
Half course (fall term). W., 11–1. EXAM GROUP: 4, 5
Proseminar for Human Evolutionary Biology graduate students. Discussion of adaptations and the process of adaptation using examples from various areas of human evolutionary biology.
Note: Open to graduate students in Human Evolutionary Biology.

*Human Evolutionary Biology 3310. Experimental Methods
Catalog Number: 9602
Members of the Department

*Human Evolutionary Biology 3320. Advanced Laboratory and Dissertations
Catalog Number: 62752
Members of the Department

*Human Evolutionary Biology 3337. Advanced Laboratory Methods in Human Endocrinology
Catalog Number: 5345
Susan F. Lipson 1969
Note: Intended for graduate students engaged in laboratory research on human endocrinology.
*Human Evolutionary Biology 3350. Laboratory Methods in Primate and Human Nutrition*
Catalog Number: 62293
*Richard W. Wrangham 2349*
Independent laboratory study in the biochemical analysis of plant and animal foods, and of human and animal digestive physiology and feeding behavior.

*Human Evolutionary Biology 3400. Advanced Reading and Research*
Catalog Number: 77859
*Members of the Department*
*Note: Consult the appropriate member of the department.*

*Human Evolutionary Biology 3500. Direction of the Doctoral Dissertations*
Catalog Number: 26337
*Members of the Department*
*Note: Consult the appropriate member of the department.*

*Human Evolutionary Biology 3595. Laboratory Methods in Evolutionary Genetics*
Catalog Number: 7934
*Maryellen Ruvolo 2512*
*Note: Limited to graduate students conducting doctoral dissertation research.*

*Human Evolutionary Biology 3600. Current Issues in Human Evolutionary Biology*
Catalog Number: 9373
*Members of the Department*
*Half course (fall term; repeated spring term). Tu., at 12.*
Weekly seminars in human evolutionary biology.

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**Inner Asian and Altaic Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Committee on Higher Degrees in Inner Asian and Altaic Studies*

Leonard W. J. van der Kuijp, Professor of Tibetan and Himalayan Studies (*Chair*)
Mark C. Elliott, Mark Schwartz Professor of Chinese and Inner Asian History (*on leave fall term*)
Rowan K. Flad, Professor of Anthropology
Janet Gyatso, Hershey Professor of Buddhist Studies (*Divinity School*)
Cemal Kafadar, Vehbi Koc Professor of Turkish Studies (*on leave 2012-13*)
C. C. Lamberg-Karlovsky, Stephen Phillips Professor of Archaeology and Ethnology
Terry D. Martin, George F. Baker III Professor of Russian Studies
Kelly A. O’Neill-Uzgiris, Associate Professor of History
Michael J. Puett, Walter C. Klein Professor of Chinese History
David J. Roxburgh, Prince Alwaleed bin Talal Professor of Islamic Art History
P. Oktor Skjaervo, Aga Khan Professor of Iranian (*on leave spring term*)
Michael Witzel, Wales Professor of Sanskrit
Richard K. Wolf, Professor of Music (*on leave 2012-13*)

The Committee supervises the work of graduate students whose interest in Inner Asia is not confined to languages alone, or history alone, but encompasses linguistics, history, religion, art history, and general cultural study. Courses relating to Inner Asian Studies are given by members of the Committee and other faculty in the departments of Anthropology, East Asian Languages and Civilizations, History, History of Art and Architecture, Linguistics, Near Eastern Languages and Civilizations, and Sanskrit and Indian Studies, and by the Committee on the Study of Religion. Interested students should consult these sections of the catalog. The Committee has offices at 1730 Cambridge Street, Cambridge, MA, 02138; 617-495-3777.

**Latin American and Iberian Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

The 2012-13 membership of this committee has not yet been finalized. Complete membership information for 2012-13 will be posted as soon as it becomes available.

*Faculty of the Committee on Latin American and Iberian Studies*

The Committee on Latin American and Iberian Studies (CLAIS) is composed of a multidisciplinary group of FAS faculty associated with the activities of the David Rockefeller Center for Latin American Studies, which promotes and coordinates research, teaching, and public programs on Latin American and related fields such as the Caribbean, the Iberian peninsula, and the Latin American Diaspora in the United States.

Founded in 1994, Harvard’s David Rockefeller Center for Latin American Studies (DRCLAS) works to increase knowledge of the cultures, economies, histories, environment, and contemporary affairs of past and present Latin America. For complete information on DRCLAS visit the David Rockefeller Center for Latin American Studies website.
Although the CLAIS does not offer an undergraduate concentration or an advanced degree, it awards a Certificate in Latin American Studies to undergraduate and graduate students who have completed an approved course of study as part of their work toward a degree in many concentrations. For complete information on Latin American Studies certificate requirements, visit the David Rockefeller Center for Latin American Studies website ("Undergraduate Certificate in Latin American Studies" or "Certificate in Latin American Studies - Graduate Students").

The following departments and professional schools offer courses related to Latin America. A more detailed description of these courses may be found in this catalog under the appropriate department, or on the course websites of the different professional schools.

Departments with Courses of Interest:

- General Education
- Freshman Seminars
- Core Curriculum
- Anthropology
- Economics
- English
- Government
- History
- History of Literature
- History of Art and Architecture
- History of Science
- Organismic and Evolutionary Biology
- The Study of Religion
- Romance Languages and Literatures
- Social Studies
- Sociology
Professional Schools with Courses of Interest:

• Harvard Business School
• Harvard Graduate School of Design
• Harvard Divinity School
• Harvard Graduate School of Education
• Harvard Kennedy School
• Harvard Law School
• Harvard Medical School
• Harvard School of Public Health
• Harvard Extension School

Related website pages, on the David Rockefeller Center for Latin American Studies website:

• Guide to Courses
• Student Resources
• College Student Resources (Undergraduate Grants and Prizes)
• Graduate and Professional School Students Resources

Life Sciences

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The Life Sciences encompass a broad array of disciplines that share a focus on understanding living systems. Life Sciences courses are jointly organized by faculty members of the Chemistry and Chemical Biology, Human Evolutionary Biology, Molecular and Cellular Biology, Organismic and Evolutionary Biology, Psychology, and Stem Cell and Regenerative Biology Departments. Life Sciences courses fulfill requirements in multiple Life Sciences Concentrations and General Education and are taught by teams of faculty from multiple departments. Incoming
students interested in the life sciences should take Harvard’s online Chemistry and Biology Placement Tests. Students who take these tests will receive a recommendation for the appropriate beginning Life Science course, either Life Science 1a, or Life and Physical Sciences A. For more information about Life Sciences Education, please visit the Life Sciences Homepage.

**Life and Physical Sciences**

**Primarily for Undergraduates**

**Life and Physical Sciences A. Foundational Chemistry and Biology**

Catalog Number: 3956  
Gregory C. Tucci and Tamara J. Brenner  
Half course (fall term). M., W., F., at 9, and a weekly one-hour of discussion section, three-hour lab, and one-hour of review session. EXAM GROUP: 2  
This course introduces fundamental concepts in chemistry and biology. Topics in chemistry include stoichiometry, acids and bases, aqueous solutions, gases, thermochemistry, electrons in atoms, and chemical bonding. Topics in biology include the transfer of information from DNA to RNA to protein, genetic inheritance, mitosis and meiosis, and cell structure.  
*Note:* Students should use their scores on the Chemistry and Biology Placement Tests to determine whether to enroll in Life and Physical Sciences A or Life Sciences 1a. This course assumes fluency with high school algebra. Students who have completed Life Sciences 1a, Physical Sciences 1, Chemistry 17 or Chemistry 20 may not take Life and Physical Sciences A for credit. This course, when taken for a letter grade, meets the General Education Requirement for Science of Living Systems. This course, when taken for a letter grade, meets the Core area requirement for either Science A or Science B, but not both.

**Life Sciences**

**Primarily for Undergraduates**

**Life Sciences 1a. An Integrated Introduction to the Life Sciences: Chemistry, Molecular Biology, and Cell Biology**

Catalog Number: 2137  
Robert A. Lue, Daniel E. Kahne, and Susan Mango  
Half course (fall term). Session 1: Tu., Th., 10-11:30, or Session 2: Tu., Th., 1-2:30, and three hours of laboratory/discussion weekly. EXAM GROUP: 12, 13  
What are the fundamental features of living systems? What are the molecules imparting them and how do their chemical properties explain their biological roles? The answers form a basis for understanding the molecules of life, the cell, diseases, and medicines. In contrast with traditional presentations of relevant scientific disciplines in separate courses, we take an integrated approach, presenting chemistry, molecular biology, biochemistry, and cell biology framed within central problems such as the biology of HIV and cancer.  
*Note:* The lecture component of this course will be taught in two separate sessions, and by the same instructors. Students will sign up for one lecture session based on their scheduling needs, and will be required to attend only that session for the entire term. For more information about the assignment process, please see the course website in the fall. This course, in combination
with Life Sciences 1b, constitutes an integrated introduction to the Life Sciences. This course, when taken for a letter grade, meets the General Education requirement in Science of Living Systems or the Core area requirement for Science A.

**Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution**

Catalog Number: 2159
Maryellen Ruvolo, Hopi E. Hoekstra, Kevin C. Eggan, and Pardis Sabeti
Half course (spring term). Tu., Th., 1-2:30, and three hours of laboratory/discussion weekly. EXAM GROUP: 15, 16
How are observable characteristics of organisms influenced by genetics? How do genomes change over time to produce the differences we see among species? This course takes an integrated approach, showing how genetics and evolution are intimately related, together explaining the patterns of genetic variation we see in nature, and how genomics can be used to analyze variation. In covering Mendelian genetics, quantitative genetics, and population genetics, this course will emphasize developments involving our own species. **Note:** This course, in combination with Life Sciences 1a, constitutes an integrated introduction to the Life Sciences. This course, when taken for a letter grade, meets the General Education requirement in Science of Living Systems or the Core area requirement for Science A.

**Life Sciences 2. Evolutionary Human Physiology and Anatomy**

Catalog Number: 9007 Enrollment: Limited to 300.
Andrew A. Biewener, Katherine J. Hinde, and George V. Lauder
Half course (fall term). M., W., F., at 1, and three hours of laboratory/discussion weekly. EXAM GROUP: 6
Why is the human body the way that it is? This course explores human anatomy and physiology from an integrated framework, combining functional, comparative, and evolutionary perspectives on how organisms work. Major topics, which follow a life-course framework, include embryogenesis, metabolism and energetics, growth and development, movement and locomotion, food and digestion, stress and disease, and reproduction. Also considered is the relevance of human biology to contemporary issues in human health and biology. **Note:** This course replaces OEB 102. This course, when taken for a letter grade, meets the General Education requirement in Science of Living Systems or the Core area requirement for Science B.

**[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]**

Catalog Number: 2164 Enrollment: May be limited.
Douglas A. Melton and Michael J. Sandel
Half course (spring term). M., 2–4, and a weekly section to be arranged.
Explores the moral, political, and scientific implications of new developments in biotechnology. Does science give us the power to alter human nature? If so, how should we exercise this power? The course examines the science and ethics of stem cell research, human cloning, sex selection, genetic engineering, eugenics, genetic discrimination, and human-animal hybrids. Readings will be drawn from literature in the areas of biology, philosophy, and public policy. **Note:** Expected to be given in 2013–14. May not be taken concurrently with Government 1093. May not be taken for credit if Government 1093 has already been taken. The course is open to
both science and non-science concentrators. Ethical Reasoning 22 (Justice) is recommended as a background. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

**Cross-listed Courses**

**MCB 192. Principles of Drug Discovery and Development**

**Science of Living Systems 11. Molecules of Life**

[*Visual and Environmental Studies 54s. Animating Science*]

**For Undergraduates and Graduates**

**[Life Sciences 100r. Experimental Research in the Life Sciences**

Catalog Number: 2122 Enrollment: Limited to 30.

*Alain Viel*

**Half course (fall term; repeated spring term). Fall: Th., 3–5; Spring: M., 1–2:30. EXAM GROUP: Fall: 17, 18; Spring: 6, 7**

A laboratory course that immerses students in a dynamic project-based research environment. Participate in experimental projects directly linked with ongoing faculty research. Students select a project from the following research tracks: neurobiology, microbial sciences, cell biology, and synthetic biology. New projects, including some in other research fields, are offered every term. In a highly collaborative atmosphere, students form a fully-functional and diverse research group based on the sharing of ideas and progress reports between projects. New projects every term. Students collaborate to form a fully-functional and diverse research group based on the sharing of ideas and progress reports between projects. The spring microbiology project is part of the "genomes to Biomes" series.

*Note:* Location of the first meeting will be announced on the course website. Open to freshmen, sophomores, juniors, and seniors, regardless of concentration, and suitable for students either with or without extensive laboratory experience. The course may only be repeated once and the second enrollment must be approved by the instructor.

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a or permission of the instructor. Students interested in a neurobiology project will need MCB 80 or permission of the instructor.

**[Life Sciences 110. A Microbial World]**

Catalog Number: 5701

*Roberto G. Kolter (Medical School) and Jon Clardy (Medical School)*

**Half course (spring term). Hours to be arranged.**

This course will cover the broad spectrum of microbial sciences from biodiversity to the crucial impact of microorganisms on geological history, the environment, climate, and world health. The course will be taught by an academically diverse team of three Microbial Sciences Initiative (MSI) faculty at a rigorous and fast-paced level appropriate for upper-level undergraduates. Topics include the origins and molecules of life, biogeochemical cycles, microbial diversity, and ecology.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Ordinarily completion of Life and Physical Sciences A or Life Sciences 1a or higher, or Physical Sciences 1 or higher, or permission of the instructor.
**Life Sciences 120. Global Health Threats**
Catalog Number: 98532 Enrollment: Limited to 50.
*Richard M. Losick and Barry R. Bloom (Public Health)*
*Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*

The multidisciplinary application of epidemiology, molecular biology and genetics, pathogenesis, drug discovery, immunology and vaccine development, and economic analysis to understanding and combating major threats to human health in developing countries. Emphasis will be on critical readings and scientific writing. Grades will be based on papers in which students will propose the application of multidisciplinary approaches to global health threats not covered in lecture.

*Prerequisite:* Life Sciences 1a and 1b or LPSA and one additional course from the following: Chemistry 27, Engineering 53, Life Sciences 2, MCB 52, MCB 54, OEB 10, OEB 53, or SCRB 10, or permission of the instructors.

For additional courses in the Life Sciences, see offerings in the following chapters:

- Chemical and Physical Biology
- Chemistry and Chemical Biology
- Human Evolutionary Biology
- Molecular and Cellular Biology
- Neurobiology
- Organismic and Evolutionary Biology
- Psychology
- Stem Cell and Regenerative Biology

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**Linguistics**

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**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Department of Linguistics*
2012-2013 Previous Courses of Instruction

Gennaro Chierchia, Haas Foundations Professor of Linguistics (Chair-fall term) (on leave spring term)
Isabelle Carole Charnavel, Assistant Professor of Linguistics
Jay Jasanoff, Diebold Professor of Indo-European Linguistics and Philology (Chair-spring term)
Michael S. Flier, Oleksandr Potemnja Professor of Ukrainian Philology
C.-T. James Huang, Professor of Linguistics (Director of Graduate Studies)
Li Jiang, College Fellow in the Department of Linguistics
Maria Polinsky, Professor of Linguistics (Director of Undergraduate Studies)
Jeremy Rau, Professor of Linguistics and of the Classics (on leave 2012-13)
Kevin M. Ryan, Assistant Professor of Linguistics
Ulrich Sauerland, Visiting Professor of Linguistics

Other Faculty Offering Instruction in the Department of Linguistics

Alfonso Caramazza, Daniel and Amy Starch Professor of Psychology
Wesley M. Jacobsen, Professor of the Practice of the Japanese Language and Director of the Japanese Language Program
Stacey Katz Bourns, Senior Lecturer on Romance Languages and Literatures
Steven Pinker, Johnstone Family Professor of Psychology, Harvard College Professor
P. Oktor Skjaervo, Aga Khan Professor of Iranian (on leave spring term)
Jesse Snedeker, Professor of Psychology

See also other course listings under the following departments of languages and literatures: Celtic, the Classics, East Asian, English, Germanic, Near Eastern, Romance, Sanskrit and Indian Studies, and Slavic; Social Analysis 34 (Core); and the linguistic offerings at MIT.

Primarily for Undergraduates

Linguistics 83. Language, Structure, and Cognition
Catalog Number: 8319
L. Julie Jiang
Half course (fall term). M., W., at 10. EXAM GROUP: 3
What do the world’s almost 7,000 languages have in common? Why do they show recurrent commonalities and principled differences? What do they reveal about the human ability for speaking and thinking? How do languages develop? How do they die? This course addresses these and related questions while introducing the languages of the world; their distribution, recurrent structural properties, and genetic classification; processes of language contact; and the relationship between language and the brain.

*Linguistics 91r. Supervised Reading and Research
Catalog Number: 1100
Maria Polinsky and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Independent study with a faculty member. For students who wish to pursue a particular linguistic topic not covered in other course offerings.
Note: Students should consult the Head Tutor about having this course count towards the concentration.

*Linguistics 97r. Group Tutorial — Sophomore Year
Catalog Number: 1791
Maria Polinsky and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Intensive study in a selected linguistic area such as phonology, syntax, historical linguistics, phonetics, morphology, semantics, psycholinguistics, acquisition, sociolinguistics, creole studies, or computational linguistics. Meets as two six-week small-group tutorials, in the spring term.
Note: Required of concentrators.

*Linguistics 98a. Group Tutorial — Junior Year
Catalog Number: 4222
Maria Polinsky and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Meets as two six-week small-group tutorials, both held in the fall term, each covering one of the areas of linguistics listed under Linguistics 97r.
Note: Required of concentrators.

*Linguistics 98b. Tutorial — Junior Year
Catalog Number: 7273
Maria Polinsky and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Individual tutorial with a faculty member.
Note: Required of concentrators.

*Linguistics 99a. Tutorial — Senior Year
Catalog Number: 3082
Maria Polinsky
Half course (fall term). Hours to be arranged.
Group tutorial led by the Head Tutor with the participation of students’ thesis advisors for research and writing of the Linguistics honors thesis. Graded Satisfactory or Unsatisfactory. An honors student who expects not to complete the thesis should consult with the Head Tutor about completing other substantial work to receive credit for the course.
Note: Both Linguistics 99a and 99b are required of all senior honors concentrators. Students who wish to enroll must obtain the signature of the Head Tutor.

*Linguistics 99b. Tutorial - Senior Year
Catalog Number: 2561
Maria Polinsky
Half course (spring term). Hours to be arranged.
Individual tutorial with a faculty member for research and writing of the Linguistics honors thesis. Graded Satisfactory or Unsatisfactory. An honors student who expects not to complete the thesis should consult with the Head Tutor about completing other substantial work to receive credit for the course.
Note: Both Linguistics 99a and 99b are required of all senior honors concentrators. Students who wish to enroll must obtain the signature of the Head Tutor.

**Cross-listed Courses**


**For Undergraduates and Graduates**

[Linguistics 100. Second Language Acquisition]
Catalog Number: 96999

*Wesley M. Jacobsen*

*Half course (fall term). Hours to be arranged.*
An overview of second-language teaching and learning focused on theoretical models, learning objectives, developmental stages, materials design, and the use of new technology in teaching. The course explores the nature of second language acquisition, focused specifically on the needs of graduate students teaching a second language.

*Note: Expected to be given in 2013–14.*

Catalog Number: 1498

*Isabelle Charnavel*

*Half course (spring term). Tu., Th., at 11; Th., at 12; Th., at 2. EXAM GROUP: 13*
This course introduces components of study of language: phonology, morphology, syntax, and semantics. It presents the view that knowledge of language is best characterized as an unconsciously internalized set of abstract rules and principles. Evidence is drawn from a variety of signed and spoken languages, language universals, child language acquisition, language change, language games, and language disorders.

[Linguistics 102. Sentence Structure]
Catalog Number: 7318

*C.-T. James Huang*

*Half course (spring term). M., W., at 11.*
What determines how the words in a sentence are put together in a given language? This course introduces the field of syntax, and the study of order and structure among words. Students will learn to construct and evaluate syntactic analyses and argumentation and will be exposed to variation and universals in the syntactic patterns found in natural languages. The course will also provide an introductory survey of syntactic phenomena, including question formation, the passive, anaphora, and agreement.

[Linguistics 104. Word Structure]
Catalog Number: 1289

*L. Julie Jiang*

*Half course (fall term). Tu., Th., at 10.*
This course investigates the nature and structure of words through the lens of contemporary
morphological theory. What’s in a word? Topics include the place of word formation in relation to phonological and syntactic phenomena, morphological processes, and the nature of the lexicon. Emphasis on the analysis of morphological phenomena in a range of typologically diverse languages.

**Linguistics 105. Sounds of Language**  
Catalog Number: 2791  
Kevin M. Ryan  
*Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13*  
What are the sounds of the world languages, and how are they organized to make words and sentences? Why are some sounds hard to hear or make? Is there a ‘universal inventory’ of sounds? This class introduces students to the sounds of the world’s languages, and provides tools for studying them systematically. We will study the setup to transfer thoughts from one brain to another.

**Linguistics 106. Knowledge of Meaning**  
Catalog Number: 6115  
Ulrich Sauerland  
*Half course (spring term). M., W., at 12; section TBA. EXAM GROUP: 5*  
An introductory course on semantic interpretation in natural language. What does it mean to "know the meaning" of an utterance? This course provides the tools to characterize and study the meanings of sentences. Topics covered include the relation between form and meaning, ambiguity, reference, context dependency, and the role of logic vs. pragmatics in communication.

**Linguistics 107 (formerly Linguistics 122). Introduction to Indo-European**  
Catalog Number: 1336  
Jay Jasanoff  
*Half course (spring term). M., W., F. at 10.*  
An introduction to the historical study of the Indo-European languages, using the comparative method to arrive at a picture of the parent language of the family, Proto-Indo-European.

**[Linguistics 108. Introduction to Historical Linguistics]**  
Catalog Number: 8486  
Jeremy Rau  
*Half course (fall term). Hours to be arranged.*  
Methods and goals of linguistic reconstruction. Topics include the regularity of sound change, types of linguistic change, the relationship between linguistic reconstruction and synchronic analysis, language contact and borrowing, and mechanisms of linguistic change, including recent theories.  
*Note:* Expected to be given in 2013–14.

**Linguistics 112. Syntactic Theory I**  
Catalog Number: 4730  
C.-T. James Huang  
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
This course provides an intensive introduction to generative syntactic theory. Emphasis on syntactic argumentation. Topics center on foundational problems in the theory of syntax, including phrase structure of nominals and clauses, varieties of movement, locality, argument structure, ellipsis case agreement, and the syntax-semantics interface.

Prerequisite: Linguistics 102, equivalent, or permission of the instructor.

[Linguistics 114. Morphological Theory]
Catalog Number: 7639

Members of the Department
Half course (fall term). Th., 3–5.
This course provides an intensive introduction to morphological theory. Students will be introduced to current research and areas of debate in morphology proper, in morpho-syntax, and in morpho-phonology.

Note: Expected to be given in 2013–14.

Prerequisite: Ling 104, equivalent, or permission of the instructor.

Linguistics 115. Phonological Theory I
Catalog Number: 1549
Kevin M. Ryan
Half course (fall term). M., 1-3.
This graduate level class is an intensive introduction to phonological theory and experimental work in phonology. This includes rule-based and constraint-based approaches, the typology of phonological processes (vowel and consonant harmony, assimilation and dissimilation, lenition and fortition, etc.), and phonological acquisition. Experimental approaches will deal with gradience, exceptionality, and productivity with an introduction to the quantitative methodologies that these phenomena require.

Prerequisite: Linguistics 105, equivalent, or permission of instructor.

Linguistics 116r. Semantic Theory I
Catalog Number: 2118
Uli Sauerland
Half course (fall term). W., 12–2. EXAM GROUP: 5, 6
An introductory course on semantics in generative grammar. This course provides the formal tools to investigate the truth-conditional meanings of sentences. Topics covered include: compositionality, type theory and the fundamentals of clause structure, quantifier scope, and variable-binding.

Prerequisite: Linguistics 106, equivalent, or permission of the instructor.

Linguistics 117r. Linguistic Field Methods
Catalog Number: 8401
Maria Polinsky
Half course (fall term). W., 2–5.
Instruction in the elicitation of phonological, morphological, and syntactic information from a native speaker of an unfamiliar language, with the object of developing a grammatical sketch of the language. Emphasis on methodology and problems of elicitation and grammatical description.
in the field. Participants work directly with the native speaker, both individually and as a group, with the assistance of the instructor.

**[Linguistics 118. Historical and Comparative Linguistics]**
Catalog Number: 2967
Jay Jasanoff
*Half course (spring term). Hours to be arranged.*
*Note:* Expected to be given in 2013–14.

**[Linguistics 123. Intermediate Indo-European]**
Catalog Number: 6959
Jay Jasanoff
*Half course (spring term). Hours to be arranged.*
Designed as a sequel to Linguistics 107. A detailed overview of Indo-European comparative grammar, with emphasis on recent developments and discoveries.
*Note:* Expected to be given in 2013–14.

**[Linguistics 130. Psycholinguistics: Seminar]**
Catalog Number: 76462
Maria Polinsky
*Half course (fall term). Hours to be arranged.*
A survey of current psycholinguistics research for students in linguistics and related fields. Provides an overview of models of language comprehension and production from word to sentence level. Aims to expose students to models and methods used in the study of language acquisition, processing, disorders, and brain imaging.
*Note:* Expected to be given in 2013–14.

**Linguistics 132. Psychosemantics**
Catalog Number: 6578
Gennaro Chierchia and Jesse Snedeker
*Half course (fall term). F., 10–1. EXAM GROUP: 3, 4, 5*
Explores issues at the interface of linguistic semantics, pragmatics and psychology. Introduces how the analysis of meaning has been pursued by linguists and psychologists. Focuses on topics that are both of central interest to theoretical linguistics and the target of experimental research. These include sentence structure, sentential connectives, quantification, numbers, mass-count distinction, adjectives and comparison, scales and modalities.
*Prerequisite:* A background in psychology or linguistics; some acquaintance with both helpful but not necessary.

**Linguistics 146. Syntax and Processing**
Catalog Number: 0536
Maria Polinsky
*Half course (spring term). Tu., Th., at 10. EXAM GROUP: 12*
Selected grammatical phenomena will be examined from a theoretical and experimental perspective, with a view toward answering questions like the following: What theoretical treatments are available? How do experimental studies distinguish among competing theoretical approaches? What kind of future experimental work is needed to resolve the outstanding issues?

**Linguistics 148. Language Universals**  
Catalog Number: 5455  
*Maria Polinsky*  
*Half course (spring term). Tu., Th., at 12. EXAM GROUP: 14*  
Provides an introduction to the study of cross-linguistic variation and analyzes alternative approaches to language universals (functional explanations, processing explanations, explanations in terms of universal grammar). Topics to be studied include word order, case marking, agreement, lexical categories, subject-hood, and information structure. Sampling techniques and the use of hierarchies will also be covered.  
*Prerequisite:* Linguistics 102 or permission of instructor.

**[Linguistics 152. Prosody and Intonation]**  
Catalog Number: 9457  
*Instructor to be determined*  
*Half course (spring term). Hours to be arranged.*  
Prosody and intonation are intricately linked to many domains of language use and linguistic structure. We examine the phonetic form of prosodic contours and intonational grouping, the function of prosody in expressing semantic and pragmatic information and in disambiguation during sentence production and comprehension, and the use of "implicit" prosody even in silent reading.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Linguistics 101 or permission of instructor.

**Linguistics 168. Introduction to Germanic Linguistics**  
Catalog Number: 7925  
*Jay Jasanoff*  
*Half course (fall term). M., W., at 11. EXAM GROUP: 4*  
An introduction to the comparative and historical linguistics of the Germanic family, with emphasis on Gothic and the early medieval languages.  
*Prerequisite:* Elementary knowledge of German, or another Germanic language, or permission of instructor.

**Linguistics 171. Structure of Chinese**  
Catalog Number: 4346  
*L. Julie Jiang*  
*Half course (spring term). Tu., 1–3.*  
Introduction to the syntactic structure of Mandarin Chinese: the basic structure of clauses and nominal constituents; words, compounds, and phrases; word order and variations; selected special topics (passives, resultatives, ba-construction, topic and relativized structures, questions, anaphora, pro drop); syntactic structure and semantic interpretation.  
*Prerequisite:* Linguistics 102 in previous or current term or permission of instructor.
**Linguistics 173. Linguistic Issues in Japanese**
Catalog Number: 4208
*Wesley M. Jacobsen*
*Half course (spring term). M., 3-5.*
An examination of selected phenomena in Japanese phonology, morphology, and syntax with special attention to difficulties encountered in the acquisition of Japanese by adult native English speakers.
*Prerequisite:* Japanese 120b or its equivalent. Familiarity with basic linguistics concepts desirable.

[Linguistics 174. Tense and Aspect in Japanese]
Catalog Number: 1856
*Wesley M. Jacobsen*
*Half course (spring term). Hours to be arranged.*
Examination of phenomena of tense and aspect in Japanese, with special attention to verbal semantics and the interaction of temporal categories with modality and transitivity.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Knowledge of Japanese equivalent to Japanese 120b, or familiarity with the linguistic structure of a non-Indo-European language, or permission of instructor.

[Linguistics 175. Structure of Japanese]
Catalog Number: 4029
*Instructor to be determined*
*Half course (spring term). Hours to be arranged.*
Introduction to the syntactic structure of Modern Japanese: the structure of clauses and noun phrases and other constituents; selected special topics such as word order and scrambling, relative clauses and other sentence modifiers, passives and causatives, case marking, etc., as they pertain to linguistic theory.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Linguistics 102 in previous or current term or permission of instructor.

[Linguistics 176. History and Prehistory of the Japanese Language]
Catalog Number: 4861
*Wesley M. Jacobsen*
*Half course (spring term). Hours to be arranged.*
An examination of evidence from the comparative method, internal reconstruction, and written documents for reconstructing prehistoric stages of the Japanese language and an overview of major developments in Japanese phonology and grammar from the Nara period through the present day.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Knowledge of Japanese equivalent to Japanese 120b, or familiarity with historical linguistics, or permission of the instructor.

[Linguistics 185. Issues in Austronesian Linguistics]
Catalog Number: 99421
*Maria Polinsky*
Half course (fall term). Hours to be arranged.
This course is an in-depth investigation into comparative Austronesian syntax. The Austronesian language family -- roughly 1,200 genetically-related languages dispersed over an area encompassing Madagascar, Taiwan, Southeast Asia, and islands of the Pacific -- exhibits several unusual properties: verb-first word order, ergativity, wh-agreement, articulated voice systems, and cleft structures. The course examines these phenomena from the perspective of comparative Austronesian syntax.
Note: Expected to be given in 2013–14.

Cross-listed Courses

[Irish 160. Advanced Modern Irish]
[Irish 161r. Continuing Advanced Modern Irish]
[Semitic Philology 130. Diglossia in Semitic Languages]

Primarily for Graduates

Linguistics 200. Second Language Acquisition
Catalog Number: 6098
Stacey Katz Bourns
Half course (fall term). M., W., 12–1:30.
An overview of second-language teaching and learning focused on theoretical models, learning objectives, developmental stages, materials design, and the use of new technology in teaching. The course explores the nature of second language acquisition, focused specifically on the needs of graduate students teaching a second language.
Note: This course must be taken for letter grade.

Linguistics 204r. Topics in Syntax
Catalog Number: 6446
C.-T. James Huang
Half course (fall term; repeated spring term). M., 3:30–6. EXAM GROUP: 8, 9
Examination of current issues in syntactic theory with focus on topics of interest to the class.

[Linguistics 205r. The Syntax-Semantics Interface]
Catalog Number: 0776
Members of the Department
Half course (fall term). Hours to be arranged.
An exploration of issues related to the architecture of the grammar, with emphasis on the structures that are interpreted at the semantic interface, and how they are derived.
Note: Expected to be given in 2013–14.

[Linguistics 206r. Argument Structure and Syntactic Structure]
Catalog Number: 9020
Instructor to be determined
Half course (spring term). T., 1-3.
What is the relationship between a predicate’s semantic content and its syntactic realization?
What is the relationship between a predicate’s event structure and its argument structure? Does a predicate’s semantics determine the syntactic frames it occurs in, or might it be the other way around?

*Note:* Expected to be given in 2013–14.

**Linguistics 207r. Topics in Semantics**
Catalog Number: 31141
Ulrich Sauerland
*Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16*
Current issues in semantics. Topics to possibly include: Scope and anaphoric properties of indefinites, quantificational variability and generic uses, long distance indefinites.

**Linguistics 212r. Syntactic Theory II**
Catalog Number: 8175
Isabelle Charnavel
*Half course (spring term). W., 1–3.*
This course is designed to enable students to follow current research in syntax. Topics vary from year to year; may include head movement, case and agreement, anaphora, functional categories, ellipsis, argument structure, constraints on movement and derivations, and on form-meaning mappings.

*Prerequisite:* Linguistics 102, equivalent, or permission of instructor.

**Linguistics 215r. Phonological Theory II**
Catalog Number: 5612
Kevin M. Ryan
*Half course (spring term). Th., 1-3.*
This course addresses topics of current interest in phonological theory, potentially including competing constraint grammar frameworks, learnability, naturalness biases, prosody, quantitative approaches (experimental or corpus-driven), variation, gradience, and the morphological interface.

*Prerequisite:* Linguistics 115.

**Linguistics 216r. Semantic Theory II**
Catalog Number: 8812
Ulrich Sauerland
*Half course (spring term). M., 4–6. EXAM GROUP: 9*
Continuation of Linguistics 116. Designed to enable students to follow current research in semantics. Topics covered include: intensional contexts, indexicals, modalities, event based semantics, presuppositions, and formal theories of implicatures.

*Prerequisite:* Linguistics 116, equivalent, or permission of the instructor.

**[Linguistics 219. Advanced Phonology]**
Catalog Number: 2151
Members of the Department
*Half course (spring term). Hours to be arranged.*
An examination of why phonological phenomena exist at all, and the nature of phonological
computation. Primarily exemplification from harmony, reduplication, and meter. Design conditions imposed by economy, perception, articulation, the learning path, and the lexicon.

Note: Expected to be given in 2013–14.

Prerequisite: Linguistics 114 or permission of instructor.

**Linguistics 220r. Advanced Indo-European**
Catalog Number: 3428
Jay Jasanoff
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Topics in Indo-European comparative grammar. Conducted as a seminar.

**Linguistics 221r. Workshop in Indo-European**
Catalog Number: 1008
Jay Jasanoff
The topic for the year will be arranged in consultation with interested students. Conducted as a seminar.

**[Linguistics 225a. Introduction to Hittite]**
Catalog Number: 8206
Jeremy Rau
Half course (fall term). Hours to be arranged.
Grammar and reading of texts in cuneiform and in transliteration; essentials of the comparative grammar of the Indo-European languages of Anatolia.
Note: Expected to be given in 2013–14.

**[Linguistics 226r. Advanced Hittite]**
Catalog Number: 0858
Instructor to be determined
Half course (fall term). Hours to be arranged.
Grammar and text readings in Cuneiform and Hieroglyphic Luvian.
Note: Expected to be given in 2013–14. Provisions will be made for any student who wishes to begin Hittite.

**Linguistics 241r. Practicum in Linguistics**
Catalog Number: 4260
Kevin Ryan and members of the Department
Half course (spring term). W., 9–11. EXAM GROUP: 2, 3
Presentation of reports on current research or assigned topics.
Note: Required of second- and third-year Linguistics graduate students.

**[Linguistics 247. Topics in Germanic Linguistics]**
Catalog Number: 3693
Members of the Department
Half course (spring term). Hours to be arranged.
Investigation of selected topics in Germanic historical linguistics.  
*Note:* Expected to be given in 2013–14.

**Linguistics 250. Old Church Slavonic**
Catalog Number: 8449  
*Michael S. Flier*  
*Half course (fall term). Tu., Th., 10–11:30.*  
History of the first Slavic literary language, its role in Slavic civilization; phonology, morphology, syntax, and vocabulary of Old Church Slavonic; reading from canonical texts.

**Linguistics 251. Advanced Readings in Church Slavonic Texts**
Catalog Number: 7038  
*Michael S. Flier*  
*Half course (fall term). Hours to be arranged.*  
Readings in canonical Old Church Slavonic texts and later Church Slavonic redactions.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Linguistics 250.

**Linguistics 252. Comparative Slavic Linguistics**
Catalog Number: 7659  
*Michael S. Flier*  
*Half course (spring term). Hours to be arranged.*  
Introduction to the historical phonology and morphology of the Slavic languages with special attention to relative chronology and linguistic geography.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Linguistics 250

**Linguistics 290. Heritage Languages and Their Speakers**
Catalog Number: 58133  
*Instructor to be determined*  
*Half course (spring term). Hours to be arranged.*  
This course will present and analyze theoretical and experimental aspects of heritage language study. A heritage language is a minority language that an individual was exposed to in childhood but never learned to full competence because of the switch to another language. The course will identify critical linguistic generalizations applying to heritage languages. We will test the universal principles of language structure that are expected to stay unchanged in any language. The students will also learn crucial methodologies and tools for investigating heritage languages and their speakers in an experimental setting. Class discussions will reflect the current social and political discourse surrounding heritage populations. The work done in this class will lead to the development of experimental methodologies and tools for studying and testing heritage languages in the classroom.  
*Note:* Expected to be given in 2013–14.

**Cross-listed Courses**
[Irish 200. Introduction to Old Irish]
[Irish 201r. Continuing Old Irish]
Welsh 225a. Medieval Welsh Language and Literature
Welsh 225b. Medieval Welsh Poetry

Graduate Courses of Reading and Research

*Linguistics 300. Direction of Doctoral Dissertations*
Catalog Number: 6729
Alfonso Caramazza 1871, Gennaro Chierchia 5355 (on leave spring term), Michael S. Flier 2878, C.-T. James Huang 4066, Wesley M. Jacobsen 3443, Jay Jasanoff 1661, Steven Pinker 4733, Maria Polinsky 5601, Jeremy Rau 4657 (on leave 2012-13), P. Oktor Skjaervo 2869 (on leave spring term), and Jesse Snedeker 4118

*Linguistics 301. Reading or Special Topics Course*
Catalog Number: 0861
Members of the Department and others listed under Linguistics 300.

Literature and Comparative Literature

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The Department of Comparative Literature has merged with the Committee on Degrees in Literature to form the Department of Comparative Literature. Please see the Department of Comparative Literature.

Mathematics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Mathematics
Noam D. Elkies, Professor of Mathematics (Chair)
Jameel Habeel Al-Aidroos, Senior Preceptor in Mathematics
Meghan Anderson, Preceptor in Mathematics
Paul G. Bamberg, Senior Lecturer on Mathematics
Juliana Victoria Belding, Preceptor in Mathematics
Alexander Bloemendal, Lecturer on Mathematics
Paul Bourgade, Benjamin Peirce Fellow
Melody Tung Chan, Lecturer on Mathematics
Janet Chen, Senior Preceptor in Mathematics
Andrew W. Cotton-Clay, Benjamin Peirce Lecturer on Mathematics
William Wade Dunham, Visiting Professor of Mathematics (Muhlenberg College)
Rachel Louise Epstein, Benjamin Peirce Fellow
Jonathan Mboyo Esole, Lecturer on Mathematics
Sukhada Fadnavis, Benjamin Peirce Fellow
Vaibhav Suresh Gadre, Benjamin Peirce Fellow
Dennis Gaitsgory, Professor of Mathematics
Peter McKee Garfield, Preceptor in Mathematics
Robin Gottlieb, Professor of the Practice of Mathematics
Benedict H. Gross, George Vasmer Leverett Professor of Mathematics, Harvard College
Professor
John T. Hall, Preceptor in Mathematics
Joseph D. Harris, Higgins Professor of Mathematics
Meredith Hegg, Preceptor in Mathematics
Michael J. Hopkins, Professor of Mathematics
Adam Jacob, Lecturer on Mathematics
Mark Kisin, Professor of Mathematics (Director of Graduate Studies)
Oliver Knill, Preceptor in Mathematics
Sarah Colleen Koch, Benjamin Peirce Lecturer on Mathematics;
Peter B. Kronheimer, William Casper Graustein Professor of Mathematics (Director of Undergraduate Studies)
Siu Cheong Lau, Benjamin Peirce Fellow
Jacob Lurie, Professor of Mathematics (on leave 2012-13)
Keerthi Shyam Madapusi Sampath, Benjamin Peirce Fellow (on leave 2012-13)
Carl Mautner, Lecturer on Mathematics
Barry C. Mazur, Gerhard Gade University Professor
Curtis T. McMullen, Maria Moors Cabot Professor of the Natural Sciences
Sophie Marguerite Morel, Professor of Mathematics
Martin A. Nowak, Professor of Mathematics and of Biology
Joseph David Rabinoff, Benjamin Peirce Lecturer on Mathematics
Emily Elizabeth Riehl, Benjamin Peirce Fellow
Wilfried Schmid, Dwight Parker Robinson Professor of Mathematics
Kevin Schnelli, Lecturer on Mathematics
Yum Tong Siu, William Elwood Byerly Professor of Mathematics (on leave spring term)
Shlomo Z. Sternberg, George Putnam Professor of Pure and Applied Mathematics (on leave spring term)
Daniel Wyler Stroock, Visiting Professor of Mathematics
Junecue Suh, Benjamin Peirce Fellow
Clifford Taubes, William Petschek Professor of Mathematics (on leave spring term)
Shangkun Weng, Lecturer on Mathematics
Hao Xu, Lecturer on Mathematics
Horng-Tzer Yau, Professor of Mathematics
Shing-Tung Yau, William Casper Graustein Professor of Mathematics
Nina Zipser, Lecturer on Mathematics and Dean for Faculty Affairs

Other Faculty Offering Instruction in the Department of Mathematics

Arthur M. Jaffe, Landon T. Clay Professor of Mathematics and Theoretical Science (on leave spring term)
Yu-jong Tzeng, Lecturer on Mathematics
Kirsten Graham Wickelgren, Lecturer on Mathematics
Hao Xu

The Mathematics Department hopes that all students will take mathematics courses. This said, be careful to take only those courses that are appropriate for your level of experience. Incoming students should take advantage of Harvard’s Mathematics Placement Test and of the science advising available in the Science Center the week before classes begin. Members of the Mathematics Department will be available during this period to consult with students. Generally, students with a strong precalculus background and some calculus experience will begin their mathematics education here with a deeper study of calculus and related topics in courses such as Mathematics 1a, 1b, 18, 19a,b, 21a,b, 23a,b and 25a,b. The Harvard Mathematics Placement Test results recommend the appropriate starting level course, either Mathematics Ma, 1a, 1b, or 21. Recommendation for Mathematics 21 is sufficient qualification for Mathematics 18, 19a,b, 21a, 23a, and 25a.

What follows briefly describes these courses: Mathematics 1a introduces the basic ideas and techniques of calculus while Mathematics 1b covers integration techniques, differential equations, and series. Mathematics 21a covers multi-variable calculus while Mathematics 21b covers basic linear algebra with applications to differential equations. Students who do not place into (or beyond) Mathematics 1a can take Mathematics Ma, Mb, a two-term sequence which integrates calculus and precalculus material and prepares students to enter Mathematics 1b.

There are a number of options available for students whose placement is to Mathematics 21. For example, Mathematics 19a,b are courses that are designed for students concentrating in the life sciences. (These course are recommended over Math 21a,b by the various life science concentrations). In any event, Math 19a can be taken either before or after Math 21a,b. Math 19b should not be taken with Math 21b. Math 19a teaches differential equations, related techniques and modeling with applications to the life sciences. Math 19b teaches linear algebra, probability and statistics with a focus on life science examples and applications. Mathematics 18 covers selected topics from Mathematics 1b and 21a for students particularly interested in economic and social science applications.

Mathematics 23 is a theoretical version of Mathematics 21 which treats multivariable calculus
and linear algebra in a rigorous, proof oriented way. Mathematics 25 and 55 are theory courses that should be elected only by those students who have a strong interest in mathematics. They assume a solid understanding of one-variable calculus, a willingness to think rigorously and abstractly about mathematics, and to work extremely hard. Both courses study multivariable calculus and linear algebra plus many very deep related topics. Mathematics 25 differs from Mathematics 23 in that the work load in Mathematics 25 is significantly more than in Mathematics 23, but then Mathematics 25 covers more material. Mathematics 55 differs from Mathematics 25 in that the former assumes a very strong proof oriented mathematics background. Mathematics 55, covers the material from Mathematics 25 plus much material from Mathematics 122 and Mathematics 113. Entrance into Mathematics 55 requires the consent of the instructor.

Students who have had substantial preparation beyond the level of the Advanced Placement Examinations are urged to consult the Director of Undergraduate Studies in Mathematics concerning their initial Harvard mathematics courses. Students should take this matter very seriously. The Mathematics Department has also prepared a pamphlet with a detailed description of all its 100-level courses and their relationship to each other. This pamphlet gives sample lists of courses suitable for students with various interests. It is available at the Mathematics Department Office. Many 100-level courses assume some familiarity with proofs. Courses that supply this prerequisite include Mathematics 23, 25, 55, 101, 112, 121, and 141. Of these, note that Mathematics 101 may be taken concurrently with Mathematics 1, 18, 19, or 21.

Mathematics 113, 114, 122, 123, 131, and 132 form the core of the department’s more advanced courses. Mathematics concentrators are encouraged to consider taking these courses, particularly Mathematics 113, 122 and 131. (Those taking 55a,b will have covered the material of Mathematics 113 and 122, and are encouraged to take Mathematics 114, 123, and 132.)

Courses numbered 200-249 are introductory graduate courses. They will include substantial homework and are likely to have a final exam, either in class or take home. Most are taught every year. They may be suitable for very advanced undergraduates. Mathematics 212a, 230a, 231a and 232a will help prepare graduate students for the qualifying examination in Mathematics. Courses numbered 250-299 are graduate topic courses, intended for advanced graduate students.

The Mathematics Department does not grant formal degree credit without prior approval for taking a course that is listed as a prerequisite of one you have already taken. Our policy is that a student who takes and passes any calculus course is not normally permitted to then take a more elementary course for credit. A student who has passed Mathematics 21a, for example, will normally not be allowed to take Mathematics 1a, or 1b for credit. The Mathematics Department is prepared to make exceptions for sufficient academic reasons; in each case, however, a student must obtain written permission from the Mathematics Director of Undergraduate Studies in advance.

In the case of students accepting admission as sophomores, this policy is administered as follows: students counting one half course of advanced standing credit in mathematics are
deemed to have passed Mathematics 1a, and students counting a full course of advanced standing credit in mathematics are deemed to have passed Mathematics 1a and 1b.

**Primarily for Undergraduates**

**Mathematics Ma (formerly Mathematics Xa). Introduction to Functions and Calculus I**
Catalog Number: 1981 Enrollment: Normally limited to 15 students per section.
Meghan Anderson, Juliana Belding, and members of the Department
Half course (fall term). Section meeting times: Section I: M., W., F., at 10; Section II: M., W., F., at 11; Section III: M. W. F., at 12 (with sufficient enrollment); and a twice weekly lab session to be arranged. **EXAM GROUP: 3**

The study of functions and their rates of change. Fundamental ideas of calculus are introduced early and used to provide a framework for the study of mathematical modeling involving algebraic, exponential, and logarithmic functions. Thorough understanding of differential calculus promoted by year long reinforcement. Applications to biology and economics emphasized according to the interests of our students.

*Note:* Required first meeting: Tuesday, September 4, 8:30 am, Science Center D. Participation in two, one hour workshops are required each week. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning. This course, when taken for a letter grade together with Mathematics Mb, meets the Core area requirement for Quantitative Reasoning.

**Mathematics Mb (formerly Mathematics Xb). Introduction to Functions and Calculus II**
Catalog Number: 3857 Enrollment: Normally limited to 15 students per section.
Meghan Anderson, Meredith Hegg, and members of the Department
Half course (spring term). Section I: M., W., F., at 10; Section II: M. W., F., at 11; Section III: M., W., F., at 12 (with sufficient enrollment); and a twice weekly lab session to be arranged. **EXAM GROUP: 1**

Continued investigation of functions and differential calculus through modeling; an introduction to integration with applications; an introduction to differential equations. Solid preparation for Mathematics 1b.

*Note:* Required first Meeting in spring: Monday, January 28, 8:30 am, Science Center A. Participation in two, one hour workshops are required each week. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning. This course, when taken for a letter grade together with Mathematics Ma, meets the Core area requirement for Quantitative Reasoning.

*Prerequisite:* Mathematics Ma.

**Mathematics 1a. Introduction to Calculus**
Catalog Number: 8434 Enrollment: Normally limited to 30 students per section.
Juliana Belding, Peter M. Garfield, Sarah Koch, and members of the Department (fall term); Oliver Knill (spring term)
Half course (fall term; repeated spring term). Fall: Section I, M., W., F., at 9 (with sufficient enrollment); Section II, M., W., F., at 10; Section III, M., W., F., at 11; Section IV, M., W., F., at 12; Section V, Tu., Th., 10-11:30; Section VI, Tu., Th., 11:30-1. Spring: Section I, M., W., F., at 10, and a weekly problem section to be arranged. **EXAM GROUP: 1**
The development of calculus by Newton and Leibniz ranks among the greatest achievements of the past millennium. This course will help you see why by introducing: how differential calculus treats rates of change; how integral calculus treats accumulation; and how the fundamental theorem of calculus links the two. These ideas will be applied to problems from many other disciplines.

*Note:* Required first meeting in fall: Wednesday, September 5, 8:30 am, Science Center C. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Prerequisite:* A solid background in precalculus.

**Mathematics 1b. Calculus, Series, and Differential Equations**

Catalog Number: 1804 Enrollment: Normally limited to 30 students per section.

Jameel Al-Aidroos, Janet Chen, Meredith Hegg, Joseph Rabinoff, Nina Zipser, and members of the Department (fall term); Robin Gottlieb, Juliana Belding, Mboyo Esole, and members of the Department (spring term).

*Half course (fall term; repeated spring term).* Section I, M., W., F., at 9 (with sufficient enrollment); Section II, M., W., F., at 10; Section III, M., W., F., at 11; Section IV, M., W., F., at 12 (with sufficient enrollment); Section V: Tu., Th., 10-11:30; Section VI, Tu., Th., 11:30-1.

*Spring:* Section I, M., W., F., at 10; Section II, M., W., F., 11; Section III, M., W., F., 12; Section IV, Tu., Th., 10-11:30 (with sufficient enrollment); Section V, Tu., Th., 11:30-1 (with sufficient enrollment), and a weekly problem section to be arranged. Required exams. **EXAM GROUP:** Fall: 2; Spring: 1

Speaking the language of modern mathematics requires fluency with the topics of this course: infinite series, integration, and differential equations. Model practical situations using integrals and differential equations. Learn how to represent interesting functions using series and find qualitative, numerical, and analytic ways of studying differential equations. Develop both conceptual understanding and the ability to apply it.

*Note:* Required first meeting in fall: Tuesday, September 4, 8:30 am, Science Center B.

Required first meeting in spring: Monday, January 28, 8:30 am, Science Center C. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Prerequisite:* Mathematics 1a, or Ma and Mb, or equivalent.

**Mathematics 18 (formerly Mathematics 20). Topics from Single and Multivariable Calculus for Social Sciences**

Catalog Number: 0906

Meredith Hegg

*Half course (fall term).* M., W., F., at 9. **EXAM GROUP:** 2

Focus on concepts and techniques of multivariable calculus most useful to those studying the social sciences, particularly economics: functions of several variables; partial derivatives; directional derivatives and the gradient; constrained and unconstrained optimization, including the method of Lagrange multipliers. Covers linear and polynomial approximation and integrals for single variable and multivariable functions; modeling with derivatives. Covers topics from Math 21a most useful to social sciences.

*Note:* Should not ordinarily be taken in addition to Mathematics 21a or Applied Mathematics 21a. Mathematics 21b can be taken before or after Mathematics 18. Examples draw primarily
from economics and the social sciences, though Mathematics 18 may be useful to students in certain natural sciences. Students whose main interests lie in the physical sciences, mathematics, or engineering should consider Math or Applied Mathematics 21a. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning.

Prerequisite: Mathematics 1b or equivalent, or a 5 on the BC Advanced Placement Examination in Mathematics.

Mathematics 19a. Modeling and Differential Equations for the Life Sciences
Catalog Number: 1256
John T. Hall
Half course (fall term; repeated spring term). M., W., F., at 1, and a weekly discussion section to be arranged. EXAM GROUP: 6
Considers the construction and analysis of mathematical models that arise in the life sciences, ecology and environmental life science. Introduces mathematics that include multivariable calculus, differential equations in one or more variables, vectors, matrices, and linear and non-linear dynamical systems. Taught via examples from current literature (both good and bad).
Note: This course is recommended over Math 21a for those planning to concentrate in the life sciences and ESPP. Can be taken with or without Mathematics 21a,b. Students with interests in the social sciences and economics might consider Mathematics 18. This course can be taken before or after Mathematics 18. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Mathematics 19b. Linear Algebra, Probability, and Statistics for the Life Sciences
Catalog Number: 6144
Peter McKee Garfield
Half course (spring term). M., W., F., at 1, and a weekly problem section to be arranged. EXAM GROUP: 6
Probability, statistics and linear algebra with applications to life sciences, chemistry, and environmental life sciences. Linear algebra includes matrices, eigenvalues, eigenvectors, determinants, and applications to probability, statistics, dynamical systems. Basic probability and statistics are introduced, as are standard models, techniques, and their uses including the central limit theorem, Markov chains, curve fitting, regression, and pattern analysis.
Note: This course is recommended over Math 21b for those planning to concentrate in the life sciences and ESPP. Can be taken with Mathematics 21a. Students who have seen some multivariable calculus can take Math 19b before Math 19a. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Mathematics 21a. Multivariable Calculus
Catalog Number: 6760 Enrollment: Normally limited to 30 students per section.
Oliver Knill, Andrew Cotton-Clay, John Hall, and members of the Department (fall term); Peter Garfield, Junecue Suh, and members of the Department (spring term)
Half course (fall term; repeated spring term). Fall: Section I, M., W., F., at 9 (with sufficient enrollment); Section II, M., W., F., at 10; Section III, M., W., F., at 11; Section IV, M., W., F., at
To see how calculus applies in practical situations described by more than one variable, we study: Vectors, lines, planes, parameterization of curves and surfaces, partial derivatives, directional derivatives and the gradient, optimization and critical point analysis, including constrained optimization and the Method of Lagrange Multipliers, integration over curves, surfaces and solid regions using Cartesian, polar, cylindrical, and spherical coordinates, divergence and curl of vector fields, and the Green’s, Stokes’s, and Divergence Theorems.

Note: Required first meeting in fall: Wednesday, September 5, 8:30 am, Science Center B. Required first meeting in spring: Monday, January 28, 8:30 am, Science Center B. May not be taken for credit by students who have passed Applied Mathematics 21a. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning. Activities using computers to calculate and visualize applications of these ideas will not require previous programming experience.

Prerequisite: Mathematics 1b or equivalent.

**Mathematics 21b. Linear Algebra and Differential Equations**
Catalog Number: 1771 Enrollment: Normally limited to 30 students per section.

Janet Chen, Junecue Suh, and members of the Department (fall term); Janet Chen, Jameel Al-Aidroos, Alexander Blomendal, and members of the Department (spring term)

Half course (fall term; repeated spring term). Fall: Section I, M., W., F., at 10 (with sufficient enrollment); Section II, M., W., F., at 11; Section III, M., W., F., at 12 (with sufficient enrollment); Spring: Section I, M., W., F., at 10; Section II, M., W., F., at 11; Section III, M., W., F., at 12 (with sufficient enrollment); Section IV, Tu., Th., 10-11:30 (with sufficient enrollment); Section V, Tu., Th., 11:30-1 (with sufficient enrollment), and a weekly problem section to be arranged. EXAM GROUP: 1

Matrices provide the algebraic structure for solving myriad problems across the sciences. We study matrices and related topics such as linear transformations and linear spaces, determinants, eigenvalues, and eigenvectors. Applications include dynamical systems, ordinary and partial differential equations, and an introduction to Fourier series.

Note: Required first meeting in fall: Tuesday, September 4, 8:30 am, Science Center C. Required first meeting in spring: Monday, January 28, 8:30 am, Science Center D. May not be taken for credit by students who have passed Applied Mathematics 21b. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning. Activities using computers to calculate and visualize applications of these ideas will not require previous programming experience.

Prerequisite: Mathematics 1b or equivalent. Mathematics 21a is commonly taken before Mathematics 21b, but is not a prerequisite, although familiarity with partial derivatives is useful.

**Mathematics 23a. Linear Algebra and Real Analysis I**
Catalog Number: 2486
Sarah Colleen Koch

Half course (fall term). M., W., F., at 11; EXAM GROUP: 4
A rigorous, integrated treatment of linear algebra and multivariable differential calculus, emphasizing topics that are relevant to fields such as physics and economics. Topics: fields, vector spaces and linear transformations, scalar and vector products, elementary topology of Euclidean space, limits, continuity, and differentiation in n dimensions, eigenvectors and eigenvalues, inverse and implicit functions, manifolds, and Lagrange multipliers.

Note: Course content overlaps substantially with Mathematics 21a,b, 25a,b, so students should plan to continue in Mathematics 23b. See the description in the introductory paragraphs in the Mathematics section of the catalog about the differences between Mathematics 23 and Mathematics 25. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Prerequisite: Mathematics 1b or a grade of 4 or 5 on the Calculus BC Advanced Placement Examination, plus an interest both in proving mathematical results and in using them.

**Mathematics 23b. Linear Algebra and Real Analysis II**
Catalog Number: 8571
Sarah Colleen Koch
Half course (spring term). M.W.F. at 11. EXAM GROUP: 4
A rigorous, integrated treatment of linear algebra and multivariable calculus. Topics: Riemann and Lebesgue integration, determinants, change of variables, volume of manifolds, differential forms, and exterior derivative. Stokes’s theorem is presented both in the language of vector analysis (div, grad, and curl) and in the language of differential forms.

Note: This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Prerequisite: Mathematics 23a.

**Mathematics 25a. Honors Linear Algebra and Real Analysis I**
Catalog Number: 1525
Benedict H. Gross
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
A rigorous treatment of linear algebra. Topics include: Construction of number systems; fields, vector spaces and linear transformations; eigenvalues and eigenvectors, determinants and inner products. Metric spaces, compactness and connectedness.

Note: Only for students with a strong interest and background in mathematics. There will be a heavy workload. May not be taken for credit after Mathematics 23. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

Prerequisite: 5 on the Calculus BC Advanced Placement Examination and some familiarity with writing proofs, or the equivalent as determined by the instructor.

**Mathematics 25b. Honors Linear Algebra and Real Analysis II**
Catalog Number: 1590
Benedict H. Gross
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3
A rigorous treatment of basic analysis. Topics include: convergence, continuity, differentiation, the Riemann integral, uniform convergence, the Stone-Weierstrass theorem, Fourier series,
differentiation in several variables. Additional topics, including the classical results of vector calculus in two and three dimensions, as time allows.

*Note:* There will be a heavy workload. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Prerequisite:* Mathematics 23a or 25a or 55a.

*Mathematics 55a. Honors Abstract Algebra*

Catalog Number: 4068

Wilfried Schmid

*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

A rigorous treatment of abstract algebra including linear algebra and group theory.

*Note:* Mathematics 55a is an intensive course for students having significant experience with abstract mathematics. Instructor’s permission required. Every effort will be made to accommodate students uncertain of whether the course is appropriate for them; in particular, Mathematics 55a and 25a will be closely coordinated for the first three weeks of instruction. Students can switch between the two courses during the first three weeks without penalty. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Mathematics 55b. Honors Real and Complex Analysis*

Catalog Number: 3312

Wilfried Schmid

*Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

A rigorous treatment of real and complex analysis.

*Note:* Mathematics 55b is an intensive course for students having significant experience with abstract mathematics. Instructor’s permission required. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Mathematics 60r. Reading Course for Senior Honors Candidates*

Catalog Number: 8500

Peter B. Kronheimer 1759

*Half course (fall term; repeated spring term). Hours to be arranged.*

Advanced reading in topics not covered in courses.

*Note:* Limited to candidates for honors in Mathematics who obtain the permission of both the faculty member under whom they want to work and the Director of Undergraduate Studies. May not count for concentration in Mathematics without special permission from the Director of Undergraduate Studies. Graded Sat/Unsat only.

*Mathematics 91r. Supervised Reading and Research*

Catalog Number: 2165

Peter B. Kronheimer

*Half course (fall term; repeated spring term). Hours to be arranged.*

Programs of directed study supervised by a person approved by the Department.

*Note:* May not ordinarily count for concentration in Mathematics.
*Mathematics 99r. Tutorial*

Catalog Number: 6024

Peter B. Kronheimer and members of the Department

**Half course (fall term; repeated spring term). Hours to be arranged.**

Supervised small group tutorial. Topics to be arranged.

**Note:** May be repeated for course credit with permission from the Director of Undergraduate Studies. Only one tutorial may count for concentration credit.

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**For Undergraduates and Graduates**

See also Applied Mathematics and Statistics.

**Mathematics 101. Sets, Groups and Topology**

Catalog Number: 8066

Rachel Louise Epstein

**Half course (fall term). M., W., F., at 1. EXAM GROUP: 6**

An introduction to rigorous mathematics, axioms, and proofs, via topics such as set theory, symmetry groups, and low-dimensional topology.

**Note:** Familiarity with algebra, geometry and/or calculus is desirable. Students who have already taken Mathematics 23a,b, 25a,b or 55a,b should not take this course for credit. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

**Prerequisite:** An interest in mathematical reasoning.

**Mathematics 103. Much Ado About Everything: The Mathematics of Leonhard Euler - (New Course)**

Catalog Number: 96217

William Wade Dunham (Muhlenberg College)

**Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16**

The focus of this course is Leonhard Euler (1707-1783), one of history’s greatest mathematicians. After surveying 16th and 17th century results that underlay his work, we shall consider Euler’s contributions to number theory, calculus, algebra, combinatorics, and other fields. This course has historical and biographical elements, but its primary objective is to introduce students to rigorous mathematics through the work of an undisputed master.

**Prerequisite:** The equivalent of Mathematics 1a, b or permission of the instructor.

**Mathematics 110. Vector Space Methods for Differential Equations**

Catalog Number: 97995

Paul G. Bamberg

**Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17**

Develops the theory of inner product spaces, both finite-dimensional and infinite-dimensional, and applies it to a variety of ordinary and partial differential equations. Topics: existence and uniqueness theorems, Sturm-Liouville systems, orthogonal polynomials, Fourier series, Fourier and Laplace transforms, eigenvalue problems, and solutions of Laplace’s equation and the wave equation in the various coordinate systems.
Prerequisite: Mathematics 23ab or 25 ab, or Mathematics 21ab plus any Mathematics course at the 100 level.

**Mathematics 112. Introductory Real Analysis**
Catalog Number: 1123
Michael J. Hopkins
*Half course (spring term). M., W., F., at 2. EXAM GROUP: 7*
An introduction to mathematical analysis and the theory behind calculus. An emphasis on learning to understand and construct proofs. Covers limits and continuity in metric spaces, uniform convergence and spaces of functions, the Riemann integral.
*Prerequisite:* Mathematics 21a,b and either an ability to write proofs or concurrent enrollment in Mathematics 101. Should not ordinarily be taken in addition to Mathematics 23a,b, 25a,b or 55a,b.

**Mathematics 113. Analysis I: Complex Function Theory**
Catalog Number: 0405
Andrew W. Cotton-Clay
*Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*
Analytic functions of one complex variable: power series expansions, contour integrals, Cauchy’s theorem, Laurent series and the residue theorem. Some applications to real analysis, including the evaluation of indefinite integrals. An introduction to some special functions.
*Prerequisite:* Mathematics 23a,b, 25a,b, or 112. Not to be taken after Mathematics 55b.

**Mathematics 114. Analysis II: Measure, Integration and Banach Spaces**
Catalog Number: 9111
Yum Tong Siu
*Half course (fall term). M., W., F., at 11. EXAM GROUP: 4*
Lebesgue measure and integration; general topology; introduction to $L^p$ spaces, Banach and Hilbert spaces, and duality.
*Prerequisite:* Mathematics 23, 25, 55, or 112.

**Mathematics 115. Methods of Analysis**
Catalog Number: 1871
Siu Cheong Lau
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*
Complex functions; Fourier analysis; Hilbert spaces and operators; Laplace’s equations; Bessel and Legendre functions; symmetries; Sturm-Liouville theory.
*Note:* Mathematics 115 is especially for students interested in physics.
*Prerequisite:* Mathematics 23a,b, 25a,b, 55a,b, or 112.

**Mathematics 116. Convexity and Optimization with Applications**
Catalog Number: 5253
Paul G. Bamberg
*Half course (fall term). M., W., 1–2:30. EXAM GROUP: 7*
Develops the theory of convex sets, normed infinite-dimensional vector spaces, and convex functionals and applies it as a unifying principle to a variety of optimization problems such as
resource allocation, production planning, and optimal control. Topics include Hilbert space, dual spaces, the Hahn-Banach theorem, the Riesz representation theorem, calculus of variations, and Fenchel duality. Students will be expected to understand and invent proofs of theorems in real and functional analysis.

Prerequisite: Mathematics 23a,b; 25a,b; or 55a,b; or, Mathematics 21a,b plus at least one other more advanced course in mathematics.

Mathematics 117. Probability and Random Processes with Economic Applications
Catalog Number: 45584
Paul G. Bamberg
Half course (spring term). M., W., at 1. EXAM GROUP: 6
A self-contained treatment of the theory of probability and random processes with specific application to the theory of option pricing. Topics: axioms for probability, calculation of expectation by means of Lebesgue integration, conditional probability and conditional expectation, martingales, random walks and Wiener processes, and the Black-Scholes formula for option pricing. Students will work in small groups to investigate applications of the theory and to prove key results.

Note: A problem-solving section is required MW 2-3 or Th 7:30-9:30 PM
Prerequisite: A thorough knowledge of single-variable calculus and infinite series, plus at least one more advanced course such as MATH E-23a that provides experience with proofs and elementary real analysis. Acquaintance with elementary probability is desirable.

Mathematics 118r. Dynamical Systems
Catalog Number: 6402
Vaibhav Suresh Gadre
Half course (fall term). M., W., F., at 1. EXAM GROUP: 6
Introduction to dynamical systems theory with a view toward applications. Topics include existence and uniqueness theorems for flows, qualitative study of equilibria and attractors, iterated maps, and bifurcation theory.
Prerequisite: Mathematics 21a,b.

Mathematics 121. Linear Algebra and Applications
Catalog Number: 7009
Paul G. Bamberg
Half course (fall term). Tu., Th., at 2:30. EXAM GROUP: 16, 17
Real and complex vector spaces, linear transformations, determinants, inner products, dual spaces, and eigenvalue problems. Applications to geometry, systems of linear differential equations, electric circuits, optimization, and Markov processes. Emphasizes learning to understand and write proofs. Students will work in small groups to solve problems and develop proofs.

Note: A problem-solving section is required Tu., Th., 3:30-4:30.
Prerequisite: Mathematics 21b or equivalent. Should not ordinarily be taken in addition to Mathematics 23a, 25a, or 55a.

Mathematics 122. Algebra I: Theory of Groups and Vector Spaces
Catalog Number: 7855
Dennis Gaitsgory  
_Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_

Groups and group actions, vector spaces and their linear transformations, bilinear forms and linear representations of finite groups.  
**Prerequisite:** Mathematics 23a, 25a, 121; or 101 with the instructor’s permission. Should not be taken in addition to Mathematics 55a.

**Mathematics 123. Algebra II: Theory of Rings and Fields**
Catalog Number: 5613  
_Dennis Gaitsgory_
_Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_

Rings and modules. Polynomial rings. Field extensions and the basic theorems of Galois theory.  
Structure theorems for modules.  
**Prerequisite:** Mathematics 122 or 55a.

**Mathematics 124. Number Theory**
Catalog Number: 2398  
_Barry C. Mazur_
_Half course (fall term). Tu., Th., 10-11:30. EXAM GROUP: 12, 13_

Factorization and the primes; congruences; quadratic residues and reciprocity; continued fractions and approximations; Pell’s equation; selected Diophantine equations; theory of integral quadratic forms.  
**Prerequisite:** Mathematics 122 (which may be taken concurrently) or equivalent.

**Mathematics 129. Number Fields**
Catalog Number: 2345  
_Mark Kisin_
_Half course (spring term). M., W., F., at 1. EXAM GROUP: 6_

Algebraic number theory: number fields, unique factorization of ideals, finiteness of class group, structure of unit group, Frobenius elements, local fields, ramification, weak approximation, adeles, and ideles.  
**Prerequisite:** Mathematics 123.

**Mathematics 130 (formerly Mathematics 138). Classical Geometry**
Catalog Number: 5811  
_Clifford Taubes_
_Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_

Presents several classical geometries, these being the affine, projective, Euclidean, spherical and hyperbolic geometries. They are viewed from many different perspectives, some historical and some very topical. Emphasis on reading and writing proofs.  
**Prerequisite:** Mathematics 21a,b, 23a, 25a or 55a (may be taken concurrently).

**Mathematics 131. Topology I: Topological Spaces and the Fundamental Group**
Catalog Number: 2381  
_Emilie Elizabeth Riehl_
_Half course (fall term). M., W., F., at 12. EXAM GROUP: 5_
Abstract topological spaces; compactness, connectedness, continuity. Homeomorphism and homotopy, fundamental groups, covering spaces. Introduction to combinatorial topology. **Prerequisite:** Some acquaintance with metric space topology (Mathematics 23a,b, 25a,b, 55a,b, 101, or 112) and with groups (Mathematics 101, 122 or 55a).

**Mathematics 132. Topology II: Smooth Manifolds**  
Catalog Number: 7725  
Andrew W. Cotton-Clay  
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5  
**Prerequisite:** Mathematics 23a,b, 25a,b, 55a,b or 112.

**Mathematics 136. Differential Geometry**  
Catalog Number: 1949  
Adam Jacob  
Half course (spring term). M., W., F., at 2. EXAM GROUP: 7  
The exterior differential calculus and its application to curves and surfaces in 3-space and to various notions of curvature. Introduction to Riemannian geometry in higher dimensions.  
**Prerequisite:** Advanced calculus and linear algebra.

**Mathematics 137. Algebraic Geometry**  
Catalog Number: 0556  
Yu-jong Tzeng  
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4  
Affine and projective spaces, plane curves, Bezout’s theorem, singularities and genus of a plane curve, Riemann-Roch theorem.  
**Prerequisite:** Mathematics 123.

**Mathematics 141. Introduction to Mathematical Logic**  
Catalog Number: 0600  
Rachel Louise Epstein  
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4  
**Prerequisite:** Any mathematics course at the level of Mathematics 21a,b or higher, or permission of instructor.

**Mathematics 143. Set Theory**  
Catalog Number: 6005  
Instructor to be determined  
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5  
Axioms of set theory. Gödel’s constructible universe. Consistency of the axiom of choice and of the generalized continuum hypothesis. Cohen’s forcing method. Independence of the AC and
GCH.


Prerequisite: Any mathematics course at the level of Mathematics 21a or higher, or permission of instructor.

[Mathematics 144. Model Theory and Algebra]
Catalog Number: 0690
Instructor to be determined

Half course (spring term). M., W., F., at 1. EXAM GROUP: 6

Note: Expected to be given in 2013–14.

Prerequisite: Mathematics 123 or the equivalent is suggested as a prerequisite, but not required.

Mathematics 152. Discrete Mathematics
Catalog Number: 8389
John T. Hall

Half course (spring term). M., W., F., at 11. EXAM GROUP: 4
An introduction to finite groups, finite fields, finite geometry, discrete probability, and graph theory. A unifying theme of the course is the symmetry group of the regular icosahedron, whose elements can be realized as permutations, as linear transformations of vector spaces over finite fields, as collineations of a finite plane, or as vertices of a graph. Taught in a seminar format, and students will gain experience in presenting proofs at the blackboard.

Note: Students who have taken Mathematics 23a,b, 25a,b or 55a,b should not take this course for credit.

Mathematics 153. Mathematical Biology-Evolutionary Dynamics
Catalog Number: 3004
Martin A. Nowak

Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Introduces basic concepts of mathematical biology and evolutionary dynamics: evolution of genomes, quasi-species, finite and infinite population dynamics, chaos, game dynamics, evolution of cooperation and language, spatial models, evolutionary graph theory, infection dynamics, somatic evolution of cancer.

Prerequisite: Mathematics 21a,b.

Mathematics 154 (formerly Mathematics 191). Probability Theory
Catalog Number: 4306
Paul Bourgade

Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
An introduction to probability theory. Discrete and continuous random variables; distribution and density functions for one and two random variables; conditional probability. Generating functions, weak and strong laws of large numbers, and the central limit theorem. Geometrical
Mathematics 155r (formerly Mathematics 192r). Combinatorics
Catalog Number: 6612
Sukhada Fadnavis
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
An introduction to counting techniques and other methods in finite mathematics. Possible topics include: the inclusion-exclusion principle and Mobius inversion, graph theory, generating functions, Ramsey’s theorem and its variants, probabilistic methods.
Prerequisite: The ability to read and write mathematical proofs. Some familiarity with group theory (Math 122 or equivalent.)

Mathematics 168. Computability Theory - (New Course)
Catalog Number: 31297
Rachel Louise Epstein
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
An introduction to computability theory (also known as recursion theory). A discussion of the problem of determining what it means for a set or function to be computable, including primitive recursion, Turing machines, and the Church-Turing Thesis. The theory of Turing degrees and the computably enumerable sets. Topics: the halting set, Turing reducibility and other reducibilities, Post’s problem, the Recursion Theorem, priority arguments, and more.
Prerequisite: The student must have the ability to read and write mathematical proofs.

Cross-listed Courses

Applied Mathematics 104 (formerly Applied Mathematics 105a). Series Expansions and Complex Analysis
Applied Mathematics 105 (formerly Applied Mathematics 105b). Ordinary and Partial Differential Equations
Applied Mathematics 107. Graph Theory and Combinatorics
*Freshman Seminar 26s. Mathematical Structures and Gödel’s Completeness Theorem

Primarily for Graduates

Mathematics 212a (formerly Mathematics 212ar). Real Analysis
Catalog Number: 5446
Shlomo Z. Sternberg
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

**Prerequisite:** Mathematics 114 or equivalent.

**Mathematics 212br. Advanced Real Analysis**
Catalog Number: 7294

*Horn-Tzer Yau*

**Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14**

This class will be an introduction to harmonic analysis and singular integral. The textbook is *Classical and Multilinear Harmonic Analysis*, Volume 1, by Muscalu and Schlag. The topics covered in the course include maximum functions, interpolation of operators, Calderon-Zygmund theory and Littlewood-Paley theory. Some elementary probability theory will also be included. Good references of this course are Stein’s book on singular integrals and Fourier analysis.

**Prerequisite:** Mathematics 212ar and 213a.

**Mathematics 213a. Complex Analysis**
Catalog Number: 1621

*Sukhada Fadnavis*

**Half course (fall term). M., W., F., at 11. EXAM GROUP: 4**

A second course in complex analysis: series, product and partial fraction expansions of holomorphic functions; Hadamard’s theorem; conformal mapping and the Riemann mapping theorem; elliptic functions; Picard’s theorem and Nevanlinna Theory.

**Prerequisite:** Mathematics 55b or 113.

**Mathematics 213br. Advanced Complex Analysis**
Catalog Number: 2641

*Curtis T. McMullen*

**Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13**

Fundamentals of Riemann surfaces. Topics may include sheaves and cohomology, potential theory, uniformization, and moduli.

**Prerequisite:** Mathematics 213a.

**Mathematics 221. Commutative Algebra**
Catalog Number: 8320

*Junecue Suh*

**Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13**

A first course in commutative algebra: Noetherian rings and modules, Hilbert basis theorem, Cayley-Hamilton theorem, integral dependence, Noether normalization, the Nullstellensatz, localization, primary decomposition, discrete valuation rings, filtrations, completions and dimension theory.

**Prerequisite:** Mathematics 123.

**[Mathematics 222. Lie Groups and Lie Algebras]**
Catalog Number: 6738

*Wilfried Schmid*
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Lie theory, including the classification of semi-simple Lie algebras and/or compact Lie groups and their representations.
Note: Expected to be given in 2013–14.
Prerequisite: Mathematics 114, 123 and 132.

Mathematics 223a (formerly Mathematics 251a). Algebraic Number Theory
Catalog Number: 8652
Joseph David Rabinoff
Half course (fall term). M., W., F., at 12. EXAM GROUP: 5
A graduate introduction to algebraic number theory. Topics: the structure of ideal class groups, groups of units, a study of zeta functions and L-functions, local fields, Galois cohomology, local class field theory, and local duality.
Prerequisite: Mathematics 129.

Mathematics 223b (formerly Mathematics 251b). Algebraic Number Theory
Catalog Number: 2783
Joseph David Rabinoff
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
Continuation of Mathematics 223a. Topics: adeles, global class field theory, duality, cyclotomic fields. Other topics may include: Tate’s thesis or Euler systems.
Prerequisite: Mathematics 223a.

Mathematics 224. Representations of Reductive Lie Groups
Catalog Number: 25927
Joseph D. Harris
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3
Lie groups, Lie algebras and their representation theory, focusing on the classical groups.

Mathematics 229x. Introduction to Analytic Number Theory
Catalog Number: 41034
Paul Bourgade
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Fundamental methods, results, and problems of analytic number theory. Riemann zeta function and the Prime Number Theorem; Dirichlet’s theorem on primes in arithmetic progressions; lower bounds on discriminants from functional equations; sieve methods, analytic estimates on exponential sums, and their applications.
Prerequisite: Mathematics 113, 123

Mathematics 230a. Differential Geometry
Catalog Number: 0372
Siu Cheong Lau
Half course (fall term). M., W., F., at 1. EXAM GROUP: 6
Elements of differential geometry: Lie groups, vector bundles, principle bundles, connections, curvature, Chern classes, geodesics, Riemannian curvature, introduction to complex and Kahler
manifolds.

*Prerequisite:* Mathematics 132 or equivalent.

**Mathematics 230br. Advanced Differential Geometry**
Catalog Number: 0504
Shing-Tung Yau
*Half course (spring term). M., W., F., at 1. EXAM GROUP: 6*

*Prerequisite:* Mathematics 230a.

**Mathematics 231a (formerly Mathematics 272a). Algebraic Topology**
Catalog Number: 7275
Peter B. Kronheimer
*Half course (fall term). M., W., F., at 2. EXAM GROUP: 7*

*Prerequisite:* Mathematics 131 and 132.

**Mathematics 231br (formerly Mathematics 272b). Advanced Algebraic Topology**
Catalog Number: 9127
Kirsten Graham Wickelgren
*Half course (spring term). M., W., F., at 2. EXAM GROUP: 7*

*Prerequisite:* Mathematics 231a.

**Mathematics 232a (formerly Mathematics 260a). Introduction to Algebraic Geometry I**
Catalog Number: 6168
Hao Xu
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*
Introduction to complex algebraic curves, surfaces, and varieties.

*Prerequisite:* Mathematics 123 and 132.

**Mathematics 232br (formerly Mathematics 260b). Algebraic Geometry II**
Catalog Number: 9205
Carl Mautner
*Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*
The course will cover the classification of complex algebraic surfaces.

*Prerequisite:* Mathematics 232a.

**Mathematics 233a (formerly Mathematics 261a). Theory of Schemes I**
Catalog Number: 6246
Melody Chan
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An introduction to the theory and language of schemes. Textbooks: Algebraic Geometry by Robin Hartshorne and Geometry of Schemes by David Eisenbud and Joe Harris. Weekly homework will constitute an important part of the course.
Prerequisite: Mathematics 221 and 232a or permission of instructor.

[Mathematics 233br (formerly Mathematics 261b). Theory of Schemes II]
Catalog Number: 3316
Instructor to be determined
Half course (spring term). Hours to be arranged.
A continuation of Mathematics 233a. Will cover the theory of schemes, sheaves, and sheaf cohomology.
Prerequisite: Mathematics 233a.

Mathematics 243 (formerly Mathematics 234). Evolutionary Dynamics
Catalog Number: 8136
Martin A. Nowak
Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17
Advanced topics of evolutionary dynamics. Seminars and research projects.
Prerequisite: Experience with mathematical biology at the level of Mathematics 153.

Mathematics 252y. Einstein Metrics - (New Course)
Catalog Number: 32088
Shing-Tung Yau
Half course (fall term). M., W., F., at 1. EXAM GROUP: 6
Construction of Einstein metrics. A discussion of the methods to construct Einstein metrics and the properties of such metrics, both in the area of algebraic geometry and differential geometry, with applications to string theory.

Mathematics 256y. Spectra and Stable Homotopy Theory - (New Course)
Catalog Number: 53396
Michael J. Hopkins
Half course (fall term). M., W., F., at 2. EXAM GROUP: 7
A course in basic stable homotopy theory, with an emphasis on the homotopy groups of spheres. Topics: spectra, generalized homology, Thom spectra, the Steenrod algebra and the Adams spectral sequence, and the formal groups and complex cobordism.
Prerequisite: Mathematics 231br

Mathematics 263x. Computational Techniques in Number Theory and Algebraic Geometry - (New Course)
Catalog Number: 38289
Noam D. Elkies
Half course (fall term). M., W., at 1. EXAM GROUP: 6
In number theory and algebraic geometry one often constructs a remarkable object without giving a good way to compute it explicitly, even when the object is as down-to-earth as an
integer or a polynomial. We develop some of the techniques, tools, tactics, and tricks that often let us exhibit and study such objects. Most of our motivating examples are low-dimensional moduli spaces of various kinds and the structures they parametrize.

**Mathematics 264x. Random Matrix and Analytic Number Theory - (New Course)**
Catalog Number: 84401
Paul Bourgade
*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
An introduction to random matrices, emphasizing how related statistics occur in analytic number theory (low-lying zeros of L-functions, spacings between large zeros, moments).

**Mathematics 266y. Geometry of Families of Curves - (New Course)**
Catalog Number: 98717
Joseph D. Harris
*Half course (fall term). M., W., F., at 10. EXAM GROUP: 3*
A study of the behavior of families of algebraic curves, focusing on the local and global geometry of their parameter spaces: Hilbert schemes, Kontsevich spaces and moduli spaces of curves.

**Mathematics 272y. Dynamics and Moduli Spaces - (New Course)**
Catalog Number: 68503
Curtis T. McMullen
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
An introduction to the theory of conformal dynamical systems, Riemann surfaces and their moduli spaces, together with topics such as billiards and the thermodynamic formalism.

**Mathematics 274y. Graph Limits Theory - (New Course)**
Catalog Number: 47195
Sukhada Fadnavis
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
An introduction to the theory of graph limits which relates large graphs to analytic objects. Topics: Szemeredi regularity lemma, Aldous-Hoover theory of exchangeable binary arrays, graph limits of dense graphs, graph limit theory for threshold graphs, regular graphs and exponential random graphs, etc.

**Mathematics 276y. SYZ Mirror Symmetry - (New Course)**
Catalog Number: 62302
Siu Cheong Lau
*Half course (spring term). W., F., 2:30–4. EXAM GROUP: 7, 8*
An introduction to geometric aspects of mirror symmetry from the viewpoint of T-duality, primarily focusing on quantum corrections by open Gromov-Witten invariants.

**Mathematics 279y. Probability and Stochastic Processes - (New Course)**
Catalog Number: 30838
Daniel Wyler Stroock
*Half course (spring term). M., W., F., at 10. EXAM GROUP: 3*
Levy-Khinchine formula for infinitely divisible groups, and its connection with Brownian motion and other stochastic processes; the connection between Brownian motion and partial differential equations (PDE’s). Further topics, such as diffusion theory applied to PDE’s or infinite-dimensional Gaussian measures, according to students’ background and interests. *Prerequisite:* A thorough grounding in measure theory, and some familiarity with basic probability theory, functional analysis, and PDE’s.

**Mathematics 283y. Topics in Partial Differential Equations - (New Course)**
Catalog Number: 16981
*Horng-Tzer Yau*
*Half course (fall term). M., W., F., at 11. EXAM GROUP: 4*

The main purpose of this course is to give an introduction to the regularity problem of the Navier-Stokes equations. We will cover two types of results: 1. Regularity for subcritical case. 2. Regularity of axial symmetric Navier-Stokes equation at the critical case. *Prerequisite:* A knowledge of Sobolev inequalities.

**Mathematics 285y. Tropical Geometry - (New Course)**
Catalog Number: 61384
*Melody Chan*
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

Introduction to tropical geometry, including Newton polytopes, enumerative geometry, Berkovich curves, metric graphs, and tropical Riemann-Roch.

**Mathematics 288y. Aspects of Elliptic Fibrations in F-Theory - (New Course)**
Catalog Number: 70954
*Jonathan Mboyo Esole*
*Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

Elliptic curves are an important subject in many branches of mathematics from number theory to algebraic geometry and cryptography. They also play a central role in several questions of theoretical physics, especially in string theory. We will review certain aspects of the geometry of elliptic fibrations and explain how recent questions in string theory provide new insights on their geometry and inspire new directions of research for mathematicians.

**Mathematics 290. Functional Analysis and Free Probability - (New Course)**
Catalog Number: 92223
*Kevin Schnelli*
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

Introduction to free probability theory, focusing on applications in random matrix theory and operator algebras.

**Mathematics 292y. The Kahler Ricci Flow - (New Course)**
Catalog Number: 76491
*Adam Jacob*
*Half course (fall term). M., W., F., at 2. EXAM GROUP: 7*

An introduction to the Kahler Ricci flow. A discussion of issues such as existence and convergence of solutions to the flow, as well as applications to current geometric problems.
Graduate Courses of Reading and Research

*Mathematics 300. Teaching Undergraduate Mathematics
Catalog Number: 3996
Robin Gottlieb and Jameel Al-Aidroos
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Become an effective instructor. This course focuses on observation, practice, feedback, and reflection providing insight into teaching and learning. Involves iterated videotaped micro-teaching sessions, accompanied by individual consultations. Required of all mathematics graduate students.

*Mathematics 304. Topics in Algebraic Topology
Catalog Number: 0689
Michael J. Hopkins 4376

*Mathematics 308. Topics in Number Theory and Modular Forms
Catalog Number: 0464
Benedict H. Gross 1112

*Mathematics 314. Topics in Differential Geometry and Mathematical Physics
Catalog Number: 2743
Shlomo Z. Sternberg 1965 (on leave spring term)

*Mathematics 316. Topics in Algebraic Topology / Arithmetic Geometry
Catalog Number: 97966
Kirsten Graham Wickelgren 6374

*Mathematics 317. Topics in Number Theory and Algebraic Geometry
Catalog Number: 46444
Joseph David Rabinoff 6356

*Mathematics 318. Topics in Number Theory
Catalog Number: 7393
Barry C. Mazur 1975

*Mathematics 320. Topics in Deformation Theory
Catalog Number: 84773
Hao Xu 6520

*Mathematics 321. Topics in Mathematical Physics
Catalog Number: 2297
Arthur M. Jaffe 2095 (on leave spring term)

*Mathematics 327. Topics in Several Complex Variables
Catalog Number: 0409
Yum Tong Siu 7550
*Mathematics 332. Topics in Algebraic Geometry
Catalog Number: 83679
Yu-jong Tzeng 6722

*Mathematics 333. Topics in Complex Analysis, Dynamics and Geometry
Catalog Number: 9401
Curtis T. McMullen 3588

*Mathematics 335. Topics in Differential Geometry and Analysis
Catalog Number: 5498
Clifford Taubes 1243 (on leave spring term)

*Mathematics 336. Topics in Mathematical Logic
Catalog Number: 32157
Rachel Louise Epstein 6721

*Mathematics 338. Topics in Complex Dynamics
Catalog Number: 61551
Sarah Colleen Koch 6308

*Mathematics 339. Topics in Combinatorics - (New Course)
Catalog Number: 83942
Sukhada Fadnavis 7084

*Mathematics 341. Topics in Number Theory
Catalog Number: 28563
Keerthi Shyam Madapusi Sampath 2232 (on leave 2012-13)

*Mathematics 345. Topics in Geometry and Topology
Catalog Number: 4108
Peter B. Kronheimer 1759

*Mathematics 346y. Topics in Analysis: Quantum Dynamics
Catalog Number: 1053
Horng-Tzer Yau 5260

*Mathematics 351. Topics in Algebraic Number Theory
Catalog Number: 3492
Richard L. Taylor 1453

*Mathematics 352. Topics in Algebraic Number Theory
Catalog Number: 86228
Mark Kisin 6281
*Mathematics 353. Topics in Teichmüller Theory
Catalog Number: 98786
Vaibhav Suresh Gadre 6623

*Mathematics 355. Topics in Category Theory and Homotopy Theory
Catalog Number: 95192
Emily Elizabeth Riehl 1416

*Mathematics 356. Topics in Harmonic Analysis
Catalog Number: 6534
Wilfried Schmid 5097

*Mathematics 358. Topics in Arithmetic Geometry
Catalog Number: 30858
Junecue Suh 6835

*Mathematics 365. Topics in Differential Geometry
Catalog Number: 4647
Shing-Tung Yau 1734

*Mathematics 366. Topics in Probability and Analytic Number Theory
Catalog Number: 64285
Paul Bourgade 6720

*Mathematics 373. Topics in Algebraic Topology
Catalog Number: 49813
Jacob Lurie 5450 (on leave 2012-13)

*Mathematics 377. Topics in Number Theory
Catalog Number: 90085
Sophie Marguerite Morel 6309

*Mathematics 381. Introduction to Geometric Representation Theory
Catalog Number: 0800
Dennis Gaitsgory 5259

*Mathematics 382. Topics in Algebraic Geometry
Catalog Number: 2037
Joseph D. Harris 2055

*Mathematics 388. Topics in Mathematics and Biology
Catalog Number: 4687
Martin A. Nowak 4568
*Mathematics 389. Topics in Number Theory
Catalog Number: 6851
Noam D. Elkies 2604

*Mathematics 395. Topics in Symplectic, Contact, and Low-Dimensional Topology
Catalog Number: 10029
Andrew Cotton-Clay

Medical Sciences

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in Medical Sciences

David E. Golan, Professor of Biological Chemistry and Molecular Pharmacology (Medical School) (Chair)
Richard T. Born, Professor of Neurobiology (Medical School)
David Lopes Cardozo, Assistant Professor of Neurobiology (Medical School) (ex officio)
Michael C. Carroll, Professor of Pediatrics (Medical School)
Constance L. Cepko, Bullard Professor of Genetics and Neuroscience (Medical School)
Stephen C. Harrison, Giovanni Armenise - Harvard Professor of Basic Biomedical Science (Medical School)
David M. Knipe, Higgins Professor of Microbiology and Molecular Genetics (Medical School)
Samara Louise Reck-Peterson, Assistant Professor of Cell Biology (Medical School)
Clifford J. Tabin, George Jacob and Jacqueline Hazel Leder Professor of Genetics (Medical School)
Shannon Turley, Associate Professor of Microbiology and Immunobiology (Medical School)
David L. Van Vactor, Professor of Cell Biology (Medical School)
Christopher T. Walsh, Hamilton Kuhn Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Sean P.J. Whelan, Professor of Microbiology and Immunobiology (Medical School)
Rachel I. Wilson, Professor of Neurobiology (Medical School)

Other Faculty Offering Instruction in the Division of Medical Sciences

Kami Ahmad, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Mark William Albers, Assistant Professor of Neurology (Medical School)
Todd Allen, Associate Professor of Medicine (Medical School)
Chester Alper, Professor of Pediatrics (Medical School)
Frederick W. Alt, Professor of Genetics (Medical School)
Galit Alter, Assistant Professor of Medicine (Medical School)
Marcus Altfeld, Associate Professor of Medicine (Medical School)
David M. Altshuler, Professor of Genetics (Medical School)
Mark Lawrence Andermann, Assistant Professor in Medicine (Medical School)
Matthew Peter Anderson, Assistant Professor of Pathology (Medical School)
Paul J. Anderson, K. Frank Austen Professor of Medicine (Medical School)
Robert Anthony, Assistant Professor of Medicine (Medical School)
Zoltan Pierre Arany, Assistant Professor of Medicine (Medical School)
Paola Arlotta, Morris Kahn Associate Professor of Stem Cell and Regenerative Biology
Jonathan P. Arm, Associate Professor of Medicine (Medical School)
M. Amin Arnaout, Professor of Medicine (Medical School)
Spyros Artavanis-Tsakonas, Professor of Cell Biology (Medical School)
John A. Assad, Professor of Neurobiology (Medical School)
Jon Christopher Aster, Professor of Pathology (Medical School)
Dennis A. Ausiello, Jackson Professor of Clinical Medicine (Medical School)
K. Frank Austen, AstraZeneca Professor of Respiratory and Inflammatory Diseases in the Department of Medicine (Medical School)
Frederick Ausubel, Professor of Genetics (Medical School)
Brian Bacskai, Associate Professor of Neurology (Medical School)
Roland Elie Baron, Professor of Oral Medicine, Infection, and Immunity (Dental School)
Dan Hung Barouch, Associate Professor of Medicine (Medical School)
Bruce P. Bean, Professor of Neurobiology (Medical School)
Jonathan R. Beckwith, American Cancer Society Professor of Microbiology and Molecular Genetics (Medical School)
Alan H. Beggs, Assistant Professor of Genetics (Medical School)
Samuel M. Behar, Associate Professor in the Department of Immunology and Infectious Diseases (Medical School)
Welcome W. Bender, Harold T. White Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Francine M. Benes, William P. and Henry B. Test Professor of Psychiatry (Medical School)
Gilles A. Benichou, Associate Professor of Surgery (Medical School)
Christophe O. Benoist, Professor of Pathology (Medical School)
Larry I. Benowitz, Professor of Surgery (Medical School)
Jack Bergman, Associate Professor of Psychobiology in the Department of Psychiatry (Medical School)
Thomas G. Bernhardt, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Bradley E. Bernstein, Associate Professor of Pathology (Medical School)
Rameen Beroukhim, Assistant Professor of Medicine (Medical School)
Sabina Berretta, Associate Professor of Psychiatry (Medical School)
Sudha Biddinger, Assistant Professor of Pediatrics (Medical School)
Joyce E. Bischoff, Assistant Professor of Cellular and Molecular Physiology (Surgery) (Medical School)
Stephen C. Blacklow, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
2012-2013 Previous Courses of Instruction

T. Keith Blackwell, Professor of Pathology (Medical School)
John Blenis, Professor of Cell Biology (Medical School)
Michael Demian Blower, Assistant Professor of Genetics (Medical School)
Richard S. Blumberg, Professor of Medicine (Medical School)
Vadim Bolshakov, Associate Professor of Psychiatry (Medical School)
Vassiliki A. Boussiotis, Associate Professor of Medicine (Medical School)
Joshua A. Boyce, Associate Professor of Medicine (Medical School)
Andrew Stephen Brack, Assistant Professor of Medicine (Medical School)
James Elliott Bradner, Assistant Professor of Medicine (Medical School)
Xandra O. Breakefield, Professor of Neurology (Medical School)
David T. Breault, Assistant Professor of Pediatrics (Medical School)
Michael B. Brenner, Theodore Bevier Bayles Professor of Medicine (Medical School)
Emery N. Brown, Warren M. Zapol Professor of Anaesthesia (Medical School)
M. Christian Brown, Associate Professor of Otology and Laryngology (Medical School)
Joan S. Brugge, Professor of Cell Biology (Medical School)
Joshua William Buckholtz, Assistant Professor of Psychology
Martha L. Bulyk, Associate Professor of Pathology (Medical School)
Stephen Buratowski, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Caroline Erter Burns, Assistant Professor of Medicine (Medical School)
Ellen D. Cahir-McFarland, Assistant Professor of Medicine (Medical School)
S. Barak Caine, Associate Professor of Psychology in the Department of Psychiatry (Medical School)
Fernando D. Camargo, Assistant Professor of Stem Cell and Regenerative Biology
James J. Campbell, Assistant Professor of Dermatology (Pathology) (Medical School)
Lewis C. Cantley, Professor of Systems Biology (Medical School)
Alan B. Cantor, Assistant Professor of Pediatrics (Medical School)
Harvey Cantor, Baruj Benacerraf Professor of Pathology (Medical School)
William A. Carlezon, Associate Professor of Psychiatry (Medical School)
Sydney S. Cash, Associate Professor of Neurology (Medical School)
Joanne Chan, Assistant Professor of Surgery (Medical School)
Stephen Y. Chan, Assistant Professor of Medicine (Medical School)
Elena Halley Chartoff, Assistant Professor of Psychiatry (Medical School)
Talal Amine Chatila, Denise and David Bunning Professor of Pediatrics in the Field of Allergy and Immunology (Medical School)
Bing Chen, Assistant Professor of Pediatrics (Medical School)
Chinfei Chen, Associate Professor of Neurology (Medical School)
Dong Feng Chen, Assistant Professor of Ophthalmology (Medical School)
Zheng-Yi Chen, Associate Professor of Otology and Laryngology (Medical School)
Bobby J. Cherayil, Associate Professor of Pediatrics (Medical School)
Roberto Chiarle, Associate Professor of Pathology (Medical School)
Kenneth R. Chien, Visiting Professor of Stem Cell and Regenerative Biology
Kin-Sang Cho, Instructor in Ophthalmology (Medical School)
James Chodosh, David Glendenning Cogan Professor of Ophthalmology in the field of Cornea and External Disease (Medical School)
James J. Chou, Associate Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Dipanjan Chowdhury, Assistant Professor of Radiation Oncology (Medical School)
Raymond Taeyong Chung, Associate Professor of Medicine (Medical School)
George M. Church, Professor of Genetics (Medical School)
Lee Stirling Churchman, Assistant Professor of Genetics (Medical School)
Karen M. Cichowski, Assistant Professor of Medicine (Medical School)
David E. Clapham, Aldo R. Castaneda Professor of Cardiovascular Research (Medical School)
Jon Clardy, Hsien Wu and Daisy Yen Wu Professor of Biological Chemistry and Molecular Pharmacology, Affiliate of the Department of Chemistry and Chemical Biology (Medical School)
Rachael Ann Clark, Assistant Professor of Dermatology (Medical School)
Donald M. Coen, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
David E. Cohen, Robert H. Ebert Professor of Medicine and Health Sciences and Technology (Medical School)
Jonathan B. Cohen, Professor of Neurobiology (Medical School)
Monica P. Colaiacovo, Associate Professor of Genetics (Medical School)
R. John Collier, Maude and Lillian Presley Professor of Microbiology and Molecular Genetics (Medical School)
David P. Corey, Professor of Neurobiology (Medical School)
Gabriel Corfas, Professor of Neurology (Medical School)
Chad A. Cowan, Assistant Professor of Stem Cell and Regenerative Biology
Christopher William Cowan, Lecturer on Psychiatry (Medical School)
David Cox, Assistant Professor of Molecular and Cellular Biology and of Computer Science
Clyde S. Crumpacker II, Professor of Medicine (Medical School)
James M. Cunningham, Associate Professor of Medicine (Medical School)
Charles A. Czeisler, Frank Baldino, Jr., Ph.D. Professor of Sleep Medicine (Medical School)
Patricia A. D’Amore, Professor of Ophthalmology (Pathology) (Medical School)
Alan D. D’Andrea, Alvan T. and Viola D. Fuller American Cancer Society Professor of Radiation Oncology (Medical School)
George Q. Daley, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Mark Joseph Daly, Associate Professor of Medicine (Medical School)
Reza Dana, Claes H. Dohlman Professor of Ophthalmology (Medical School)
Nika Danial, Assistant Professor of Pathology (Medical School)
Gaudenz Danuser, Professor of Cell Biology (Medical School)
Darlene Ann Dartt, Associate Professor of Ophthalmology (Medical School)
Sandeep Robert Datta, Assistant Professor of Neurobiology (Medical School)
Philip Lawrence De Jager, Assistant Professor of Neurology (Medical School)
James A. DeCaprio, Associate Professor of Medicine (Medical School)
Bertrand Delgutte, Professor of Otology and Laryngology (Medical School)
Ronald C. Desrosiers, Professor of Microbiology and Molecular Genetics (Medical School)
Charles J. Dimitroff, Assistant Professor of Dermatology (Medical School)
Michael Tri Hoang Do, Assistant Professor of Neurology (Medical School)
Patricia K. Donahoe, Marshall K. Bartlett Professor of Surgery (Medical School)
Martin E. Dorf, Professor of Pathology (Medical School)
Simon L. Dove, Assistant Professor of Pediatrics (Microbiology and Molecular Genetics) (Medical School)
Glenn Dranoff, Associate Professor of Medicine (Medical School)
Ronny I. Drapkin, Assistant Professor of Pathology (Medical School)
Iain A. Drummond, Associate Professor of Medicine (Medical School)
Catherine Dulac, Higgins Professor of Molecular and Cellular Biology
Susan M. Dymecki, Assistant Professor of Genetics (Medical School)
Nicholas J. Dyson, Professor of Medicine (Medical School)
Ruth Anne Eatock, Associate Professor of Otology and Laryngology (Medical School)
Benjamin L. Ebert, Assistant Professor of Medicine (Medical School)
Michael J. Eck, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Donald Keith Eddington, Associate Professor of Otology and Laryngology (Medical School)
Elaine A. Elion, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Stephen J. Elledge, Gregor Mendel Professor of Genetics and of Medicine (Medical School)
Alan N. Engelman, Associate Professor of Medicine (Medical School)
Florian Engert, Professor of Molecular and Cellular Biology
Elizabeth C. Engle, Professor of Neurology (Medical School)
Raymond L. Erikson, American Cancer Society Professor of Cellular and Developmental Biology
Emad Eskandar, Associate Professor of Surgery (Medical School)
Myron Essex, Mary Woodard Lasker Professor of Health Sciences (Public Health)
David T. Evans, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Mark Adrian Exley, Assistant Professor of Medicine (Medical School)
Michela Fagiolini, Assistant Professor of Neurology (Medical School)
Michael R. Farzan, Associate Professor of Microbiology and Molecular Genetics (Medical School)
Mel B. Feany, Associate Professor of Pathology (Medical School)
Edda Fiebiger, Assistant Professor of Pediatrics (Medical School)
Stan Neil Finkelstein, Associate Professor of Medicine (Medical School)
Daniel Finley, Professor of Cell Biology (Medical School)
David E. Fisher, Edward Wigglesworth Professor of Dermatology (Medical School)
John G. Flanagan, Professor of Cell Biology (Medical School)
Mark Daniel Fleming, S. Burt Wolbach Professor of Pathology (Medical School)
Ramon A. Franco, Associate Professor of Otology and Laryngology (Medical School)
David A. Frank, Associate Professor of Medicine (Medical School)
Matthew P. Frosch, Associate Professor of Health Sciences and Technology (Medical School)
Barbara C. Fullerton, Assistant Professor of Otology and Laryngology (Medical School)
Dana Gabuzda, Professor of Neurology (Medical School)
Michaela Gack, Assistant Professor of Microbiology and Immunobiology (Medical School)
Guillermo Garcia-Cardenas, Associate Professor of Pathology (Medical School)
Levi Alexander Garraway, Assistant Professor of Medicine (Medical School)
Wendy S. Garrett, Assistant Professor of Immunology and Infectious Diseases (Public Health)
Rachelle Gaudet, Professor of Molecular and Cellular Biology
Suzanne Gaudet, Assistant Professor of Genetics (Medical School)
Raif S. Geha, James L. Gamble Professor of Pediatrics (Medical School)
Lee Gehrke, Professor of Microbiology and Molecular Genetics (Medical School)
Katia Georgopoulos, Professor of Dermatology (Medical School)
Anne Giersch, Assistant Professor of Pathology (Medical School)
Michael S. Gilmore, Sir William Osler Professor of Ophthalmology (Medical School)
Michael A. Gimbrone, Elsie T. Friedman Professor of Pathology (Medical School)
Alexander Gimelbrant, Assistant Professor of Genetics (Medical School)
Vadim Gladyshev, Professor of Medicine (Medical School)
Wolfram Goessling, Assistant Professor of Medicine (Medical School)
Alfred L. Goldberg, Professor of Cell Biology (Medical School)
Marcia Goldberg, Associate Professor in the Department of Immunology and Infectious Diseases (Medical School)
Michael Goldberg, Assistant Professor of Microbiology and Immunobiology (Medical School)
Anne E. Goldfeld, Professor in the Department of Immunology and Infectious Diseases (Medical School)
Lisa V. Goodrich, Associate Professor of Neurobiology (Medical School)
Laurie Joy Goodyear, Associate Professor of Medicine (Medical School)
Jesse M. Gray, Assistant Professor of Genetics (Medical School)
Nathanael Gray, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Michael E. Greenberg, Nathan Marsh Pusey Professor of Neurobiology (Medical School)
Richard Ian Gregory, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Anna Greka, Assistant Professor of Medicine (Medical School)
Chenghua Gu, Assistant Professor of Neurobiology (Medical School)
John J. Guinan, Professor of Otology and Laryngology (Medical School)
James Gusella, Bullard Professor of Neurogenetics in the Department of Genetics (Medical School)
Emanuela Gussoni, Assistant Professor of Pediatrics (Medical School)
Steven P. Gygi, Associate Professor of Cell Biology (Medical School)
Daniel A. Haber, Kurt J. Isselbacher/Peter D. Schwartz Professor of Medicine (Medical School)
Nir Hacohen, Assistant Professor of Medicine (Medical School)
William C. Hahn, Associate Professor of Medicine (Medical School)
Kevin M. Haigis, Assistant Professor of Pathology (Medical School)
Marcia C. Haigis, Assistant Professor of Pathology (Medical School)
William Nicholas Haining, Assistant Professor of Pediatrics (Medical School)
J. Wade Harper, Bert and Natalie Vallee Professor of Molecular Pathology (Medical School)
Matthew Harris, Assistant Professor of Genetics (Medical School)
Christopher D. Harvey, Assistant Professor of Neurobiology (Medical School)
Corey Harwell, Assistant Professor on Neurobiology (Medical School)
Aditi Hazra, Instructor of Epidemiology (School of Public Health)
Xi He, Assistant Professor of Neurology (Medical School)
James Tracey Heaton, Assistant Professor of Surgery (Medical School)
Maxwell G. Heiman, Assistant Professor of Genetics (Medical School)
Martin E. Hemler, Professor of Pathology (Medical School)
Takao K. Hensch, Professor of Molecular and Cellular Biology
Elizabeth Petri Henske, Professor of Medicine (Medical School)
Darren E. Higgins, Professor of Microbiology and Molecular Genetics (Medical School)
Jonathan M. G. Higgins, Assistant Professor of Medicine (Medical School)
Robert E. Hillman, Associate Professor of Surgery (Medical School)
Martin S. Hirsch, Professor in the Department of Immunology and Infectious Diseases (Medical School)
Joel N. Hirschhorn, Associate Professor of Genetics (Medical School)
I-Cheng Ho, Associate Professor of Medicine (Medical School)
Konrad Hochedlinger, Professor of Stem Cell and Regenerative Biology (Medical School)
Ann Hochschild, Professor of Microbiology and Molecular Genetics (Medical School)
Hanno Reinhard Hock, Assistant Professor of Medicine (Medical School)
James M. Hogle, Edward S. Harkness Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Jeffrey Robb Holt, Associate Professor of Otology and Laryngology (Medical School)
Bruce H. Horwitz, Assistant Professor of Pediatrics (Medical School)
Peter M. Howley, Shattuck Professor of Pathological Anatomy (Medical School)
Victor Wee Hsu, Associate Professor of Medicine (Medical School)
Deborah Tan Hung, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Sun Hur, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Robert Husson, Associate Professor of Pediatrics (Medical School)
Bradley T. Hyman, John B. Penney, Jr. Professor of Neurology (Medical School)
Donald E. Ingber, Professor of Bioengineering
Ole S. Isacson, Professor of Neurology (Medical School)
Joseph E. Italiano, Assistant Professor of Surgery (Medical School)
Laurie Jackson-Grusby, Assistant Professor of Pathology (Medical School)
Rakesh K. Jain, A. Werk Cook Professor of Radiation Oncology (Tumor Biology) (Medical School)
Pasi Antero Janne, Associate Professor of Medicine (Medical School)
Frances E. Jensen, Professor of Neurology (Medical School)
Eric Christian Johannsen, Assistant Professor of Medicine (Medical School)
Robert P. Johnson, Associate Professor of Medicine (Medical School)
J. Keith Joung, Associate Professor of Pathology (Medical School)
Pascal Kaeser, Assistant Professor of Neurobiology (Medical School)
Jonathan C. Kagan, Assistant Professor of Pediatrics (Medical School)
C. Ronald Kahn, Mary K. Iacocca Professor of Medicine (Medical School)
Daniel E. Kahne, Professor of Chemistry and Chemical Biology
Suzanne Walker, Professor of Microbiology and Immunobiology (Medical School)
Nada Y. Kalaany, Assistant Professor of Pediatrics (Medical School)
Yoshihide Kanaoka, Assistant Professor of Medicine (Medical School)
Joshua M. Kaplan, Professor of Neurobiology (Medical School)
Antoine Karnoub, Assistant Professor of Pathology (Medical School)
Dennis L. Kasper, Professor of Microbiology and Molecular Genetics (Medical School)
Howard R. Katz, Associate Professor of Medicine (Medical School)
2012-2013 Previous Courses of Instruction

Amitinder Kaur, Assistant Professor of Medicine (Medical School)
Kenneth M. Kaye, Associate Professor of Medicine (Medical School)
Andrius Kazlauskas, Associate Professor of Ophthalmology (Medical School)
Raymond J. Kelleher, Assistant Professor of Neurology (Medical School)
Vicki R. Kelley, Professor of Medicine (Medical School)
Roya Khosravi-Far, Associate Professor of Pathology (Medical School)
Samia Joseph Khoury, Jack, Sadie and David Breakstone Professor of Neurology (Medical School)
Elliott D. Kieff, Professor of Microbiology and Molecular Genetics (Medical School)
Carla Kim, Assistant Professor of Genetics (Medical School)
Kwang-So Kim, Associate Professor of Psychiatry (Medical School)
Jean-Pierre Kinet, Professor of Pathology (Medical School)
Randy King, Harry C. McKenzie Associate Professor of Cell Biology (Medical School)
Robert E. Kingston, Professor of Genetics (Medical School)
Tomas Kirchhausen, Professor of Cell Biology (Medical School)
Marc W. Kirschner, John Franklin Enders University Professor of Systems Biology (Medical School)
Michael Klagsbrun, Patricia A. Donahoe Professor of Surgery (Pathology) (Medical School)
Nancy Kleckner, Herchel Smith Professor of Molecular Biology
James Bradley Kobler, Assistant Professor of Surgery (Medical School)
Isaac S. Kohane, Lawrence J. Henderson Professor of Pediatrics (Medical School)
Roberto G. Kolter, Professor of Microbiology and Molecular Genetics (Medical School)
Maria Irene Kontaridis, Assistant Professor of Medicine (Medical School)
Igor J. Koralkin, Professor of Neurology (Medical School)
Edward A. Kravitz, George Packer Berry Professor of Neurobiology (Medical School)
Jordan A. Kreidberg, Associate Professor of Pediatrics (Medical School)
Gabriel Kreiman, Assistant Professor of Neurology (Medical School)
Raju Kucherlapati, Paul C. Cabot Professor of Genetics (Medical School)
Vijay K. Kuchroo, Samuel L. Wasserstrom Professor of Neurology (Medical School)
Bernhard Kuhn, Assistant Professor of Pediatrics (Medical School)
Sharon G. Kuchroo, Associate Professor of Otology and Laryngology (Medical School)
Rohit N. Kulkarni, Associate Professor of Medicine (Medical School)
Samuel M. Kunes, Professor of Molecular and Cellular Biology
Louis M. Kunkel, Professor of Genetics (Medical School)
Thomas Seth Kupper, Thomas B. Fitzpatrick Professor of Dermatology (Medical School)
Daniel R. Kuritzkes, Professor of Medicine (Medical School)
Mitzi I. Kuroda, Professor of Genetics (Medical School)
David J. Kwiatkowski, Professor of Medicine (Medical School)
Lois A. Lampson, Associate Professor of Surgery (Medical School)
Carole Landisman, Assistant Professor of Neurology (Medical School)
David M. Langenau, Assistant Professor of Pathology (Medical School)
Andrew B. Lassar, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Matthew James Lavoie, Assistant Professor of Neurology (Medical School)
Sylvie Le Gall, Assistant Professor of Medicine (Medical School)
Charles Lee, Associate Professor of Pathology (Medical School)
Jeannie T. Lee, Assistant Professor of Genetics (Medical School)
Tun-hou Lee, Professor of Virology (Public Health)
Maria Kristiina Lehtinen, Assistant Professor of Pathology (Medical School)
Wayne I. Lencer, Professor of Pediatrics (Medical School)
Cammie Lesser, Assistant Professor of Medicine (Microbiology and Molecular Genetics) (Medical School)
Anthony G. Letai, Assistant Professor of Medicine (Medical School)
Bruce D. Levy, Associate Professor of Medicine (Medical School)
Ofer Levy, Assistant Professor of Pediatrics (Medical School)
Zhe Li, Assistant Professor of Medicine (Medical School)
Ronglih Liao, Associate Professor of Medicine (Medical School)
Stephen Daniel Liberles, Assistant Professor of Cell Biology (Medical School)
M. Charles Liberman, Harold F. Schuknecht Professor of Otology and Laryngology (Medical School)
Andrew H. Lichtman, Professor of Pathology (Medical School)
Jeff W. Lichtman, Jeremy R. Knowles Professor of Molecular and Cellular Biology (on leave spring term)
Judy Lieberman, Professor of Pediatrics (Medical School)
David Morse Livingston, Professor of Genetics (Medical School)
Margaret S. Livingstone, Professor of Neurobiology (Medical School)
Eng H. Lo, Professor of Radiology (Medical School)
Massimo Loda, Professor of Pathology (Medical School)
Mary R. Loeken, Associate Professor of Medicine (Physiology) (Medical School)
Irving M. London, Professor of Medicine in Harvard University and in the Massachusetts Institute of Technology, Emeritus (Medical School)
A. Thomas Look, Professor of Pediatrics (Medical School)
Joseph John Loparo, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Stephen Lory, Professor of Microbiology and Molecular Genetics (Medical School)
Joseph Loscalzo, Hersey Professor of the Theory and Practice of Medicine (Medical School)
Kun Ping Lu, Professor of Medicine (Medical School)
Hongbo Luo, Assistant Professor of Pathology (Medical School)
Francis W. Luscinskas, Professor of Pathology (Medical School)
Andrew D. Luster, Persis, Cyrus and Marlow B. Harrison Professor of Medicine (Medical School)
Qiufu Ma, Associate Professor of Neurobiology (Medical School)
Richard L. Maas, Professor of Medicine (Medical School)
John David Mably, Assistant Professor of Genetics (Medical School)
Marcy E. MacDonald, Professor of Neurology (Medical School)
Jeffrey D. Macklis, Professor of Stem Cell and Regenerative Biology and Professor of Surgery and Neurology, Harvard Medical School
Calum Archibald MacRae, Assistant Professor of Medicine (Medical School)
Joseph A. Majzoub, Thomas Morgan Rotch Professor of Pediatrics (Medical School)
Clint L. Makino, Associate Professor of Ophthalmology (Neuroscience) (Medical School)
Richard Malley, Associate Professor of Pediatrics (Medical School)
Susan Mango, Professor of Molecular and Cellular Biology
Wayne A. Marasco, Associate Professor of Medicine (Medical School)
Eleftheria Maratos-Flier, Professor of Medicine (Medical School)
Jarrod Marto, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Richard H. Masland, Professor of Neurobiology (Medical School)
Diane J. Mathis, Professor of Pathology (Medical School)
John Maunsell, Alice and Rodman W. Moorhead III Professor of Neurobiology (Medical School)
Tanya Mayadas, Professor of Pathology (Medical School)
Sandrine McAllister, Assistant Professor of Medicine (Medical School)
Steven A. McCarroll, Assistant Professor of Genetics (Medical School)
Andrea I. McClatchey, Assistant Professor of Pathology (Medical School)
Frank D. McKeon, Professor of Cell Biology (Medical School)
Terry K. Means, Assistant Professor of Medicine (Medical School)
Alexander Meissner, Associate Professor of Stem Cell & Regenerative Biology
Markus Meister, Visiting Professor of Molecular and Cellular Biology
John J. Mekalanos, Adele Lehman Professor of Microbiology and Molecular Genetics (Medical School)
Jennifer R. Melcher, Associate Professor of Otology and Laryngology (Medical School)
Thorsten Roman Mempel, Assistant Professor of Medicine (Medical School)
Matthew L. Meyerson, Professor of Pathology (Medical School)
Thomas Michel, Professor of Medicine (Medical School)
Richard N. Mitchell, Lawrence J. Henderson Associate Professor of Pathology and Health Sciences and Technology (Medical School)
Timothy J. Mitchison, Hasib Sabbagh Professor of Systems Biology (Medical School)
Danesh Moazed, Professor of Cell Biology (Medical School)
D. Branch Moody, Associate Professor of Medicine (Medical School)
James J. Moon, Assistant Professor of Medicine (Medical School)
Jorge Rodrigo Mora, Assistant Professor of Medicine (Medical School)
Cynthia C. Morton, William Lambert Richardson Professor of Obstetrics, Gynecology and Reproductive Biology (Medical School)
Marsha Moses, Julia Dyckman Andrus Professor of Surgery (Medical School)
Raul Mostoslavsky, Assistant Professor of Medicine (Medical School)
Mohammad Motamedi, Assistant Professor of Medicine (Medical School)
Richard C. Mulligan, Mallinckrodt Professor of Genetics (Medical School)
Peter Hermann Mundel, Associate Professor of Medicine (Medical School)
Karl Münger, Associate Professor of Medicine (Medical School)
Venkatesh N. Murthy, Professor of Molecular and Cellular Biology (on leave fall term)
Anders Michael Naar, Associate Professor of Cell Biology (Medical School)
Joseph B. Nadol, Walter Augustus Lecompte Professor of Otology and Laryngology (Medical School)
N. Nanda Nanthakumar, Assistant Professor of Pediatrics (Medical School)
Charles A. Nelson, Professor in the Department of Society, Human, Development and Health (Public Health)
Christopher Holmes Newton-Cheh, Assistant Professor of Medicine (Medical School)
Max L. Nibert, Professor of Microbiology and Molecular Genetics (Medical School)
Anne Nicholson-Weller, Professor of Medicine (Medical School)  
Trista Elizabeth North, Assistant Professor of Pathology (Medical School)  
Luigi D. Notarangelo, Professor of Pathology (Medical School)  
Carl D. Novina, Assistant Professor of Pathology (Medical School)  
Marjorie A. Oettinger, Professor of Genetics (Medical School)  
Bjørn R. Olsen, Hersey Professor of Cell Biology (Medical School)  
Stuart H. Orkin, David G. Nathan Professor of Pediatrics (Medical School)  
Umut Ozcan, Assistant Professor of Pediatrics (Medical School)  
Pier Paolo Pandolfi, George C. Reisman Professor of Medicine (Medical School)  
Peter J. Park, Assistant Professor of Pediatrics (Medical School)  
Carol A. Paronis (Medical School)  
David L. Paul, Professor of Neurobiology (Medical School)  
Barry Htin Paw, Assistant Professor of Medicine (Medical School)  
David Pellman, Professor of Cell Biology (Medical School)  
Lev T. Perelman, Associate Professor of Obstetrics, Gynecology and Reproductive Biology (Medical School)  
Norbert Perrimon, Professor of Genetics (Medical School)  
Xianhua Piao, Assistant Professor of Pediatrics (Medical School)  
Gerald Pier, Professor of Medicine (Microbiology and Molecular Genetics) (Medical School)  
Shiv S. Pillai, Associate Professor of Health Sciences and Technology (Medical School)  
Mikael J. Pittet, Assistant Professor of Radiology (Medical School)  
Diego Pizzagalli, Associate Professor of Psychiatry (Medical School)  
Robert M. Plenge, Assistant Professor of Medicine (Medical School)  
Martin R. Pollak, Associate Professor of Medicine (Medical School)  
Daniel B. Polley, Assistant Professor of Otology and Laryngology (Medical School)  
Kornelia Polyak, Associate Professor of Medicine (Medical School)  
Scott L. Pomeroy, Bronson Crothers Professor of Neurology (Medical School)  
Pere B. Puigserver, Associate Professor of Cell Biology (Medical School)  
Samuel D. Rabkin, Associate Professor of Surgery (Microbiology and Molecular Genetics) (Medical School)  
Jayaraj Rajagopal, Assistant Professor of Medicine (Medical School)  
Tom Rapoport, Professor of Cell Biology (Medical School)  
Elio Raviola, Bullard Professor of Neurobiology (Medical School)  
Soumya Raychaudhuri, Assistant Professor of Medicine (Medical School)  
Wade G. Regehr, Professor of Neurobiology (Medical School)  
David E. Reich, Associate Professor of Genetics (Medical School)  
R. Clay Reid, Professor of Neurobiology (Medical School)  
Ellis L. Reinherz, Professor of Medicine (Medical School)  
Charles C. Richardson, Edward S. Wood Professor of Biological Chemistry and Molecular Pharmacology (Medical School)  
John L. Rinn, Associate Professor of Stem Cell & Regenerative Biology  
Charles M. Roberts, Assistant Professor of Pediatrics (Medical School)  
Thomas M. Roberts, Professor of Pathology (Medical School)  
Edwin Malcolm Robertson, Assistant Professor of Neurology (Medical School)  
Dragana Rogulja, Assistant Professor in Neurobiology (Medical School)  
Barrett J. Rollins, Linde Family Professor of Medicine (Medical School)
2012-2013 Previous Courses of Instruction

Evan David Rosen, Assistant Professor of Medicine (Medical School)
Vicki Rosen, Professor of Developmental Biology (Dental School)
Paul Allen Rosenberg, Associate Professor of Neurology (Medical School)
Anthony Rosenzweig, Professor of Medicine (Medical School)
John J. Rosowski, Professor of Otology and Laryngology (Medical School)
Derrick J. Rossi, Assistant Professor of Stem Cell and Regenerative Biology
Eric J. Rubin, Assistant Professor of Medicine (Microbiology and Molecular Genetics) (Medical School)
Lee L. Rubin, Professor of Stem Cell and Regenerative Biology
Robert H. Rubin, Gordon and Marjorie Osborne Professor of Health Sciences and Technology (Medical School)
Joan V. Ruderman, Marion V. Nelson Professor of Cell Biology (Medical School)
David Z. Rudner, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Uwe Rudolph, Associate Professor of Psychiatry (Medical School)
Ruth M. Ruprecht, Professor of Medicine (Medical School)
Gary B. Ruvkun, Professor of Genetics (Medical School)
Bernardo L. Sabatini, Professor of Neurobiology (Medical School)
David H. Sachs, Paul S. Russell/Warner Lambert Professor of Surgery (Medical School)
Mustafa Sahin, Assistant Professor of Neurology (Medical School)
Magali Saint-Geniez, Assistant Professor of Ophthalmology (Medical School)
Adrian Sălic, Assistant Professor on Cell Biology (Medical School)
Joshua R. Sanes, Jeff C. Tarr Professor of Molecular and Cellular Biology (on leave spring term)
Clifford B. Saper, James Jackson Putnam Professor of Neurology (Medical School)
David T. Scadden, Professor of Stem Cell and Regenerative Biology and Gerald and Darlene Jordan Professor of Medicine
Clemens Scherzer, Assistant Professor of Neurology (Medical School)
Alexander F. Schier, Leo Erikson Life Sciences Professor of Molecular and Cellular Biology
Stuart L. Schreiber, Morris Loeb Professor of Chemistry
Peter H. Schur, Professor of Medicine (Medical School)
Thomas L. Schwarz, Professor of Neurology and Neurobiology in the Department of Neurology (Medical School)
Ralph Scully, Assistant Professor of Medicine (Medical School)
Brian Seed, Professor of Genetics (Medical School)
Rosalind A. Segal, Professor of Neurobiology (Medical School)
Christine E. Seidman, Professor of Genetics (Medical School)
Jonathan G. Seidman, Henrietta B. and Frederick H. Bugher Foundation Professor of Genetics (Medical School)
Dennis J. Selkoe, Vincent and Stella Coates Professor of Neurologic Diseases in the Department of Neurology (Medical School)
Charles N. Serhan, Simon Gelman Professor of Anaesthesia (Medical School)
Arlene H. Sharpe, George Fabyan Professor of Comparative Pathology (Medical School)
Jen Sheen, Professor of Genetics (Medical School)
Jie Shen, Professor of Neurology (Medical School)
Christopher A. Shera, Associate Professor of Otology and Laryngology (Medical School)
Yang Shi, Professor of Pathology (Medical School)
Yujiang Shi, Assistant Professor of Medicine (Medical School)
William Shih, Associate Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Ramesh Arjun Shivdasani, Associate Professor of Medicine (Medical School)
Steven E. Shoelson, Professor of Medicine (Medical School)
Piotr Sicinski, Assistant Professor of Pathology (Medical School)
Pamela A. Silver, Elliott T. and Onie H. Adams Professor of Biochemistry and Systems Biology (Medical School)
David A. Sinclair, Professor of Pathology (Medical School)
Susan A. Slaugenhaupt, Associate Professor of Neurology (Medical School)
Scott Brian Snapper, Associate Professor of Medicine (Medical School)
Joseph G. Sodroski, Professor in the Department of Immunology and Infectious Diseases (Public Health)
Caren Grossbard Solomon, Associate Professor of Medicine (Medical School)
Peter K. Sorger, Professor of Systems Biology (Medical School)
Bruce M. Spiegelman, Stanley J. Korsmeyer Professor of Cell Biology and Medicine (Medical School)
Michael Springer, Assistant Professor of Systems Biology (Medical School)
Timothy A. Springer, Latham Family Professor of Pathology (Medical School)
Konstantina Stankovic, Assistant Professor of Otology and Laryngology (Medical School)
Michael Starnbach, Professor of Microbiology and Molecular Genetics (Medical School)
Joan E. Stein-Streilein, Associate Professor of Ophthalmology (Medical School)
Beth Stevens, Assistant Professor of Neurology and Immunology (Medical School)
Richard L. Stevens, Professor of Medicine (Medical School)
Robert A. Stickgold, Associate Professor of Psychiatry (Medical School)
Charles D. Stiles, Professor of Microbiology and Molecular Genetics (Medical School)
Gary R. Strichartz, Professor of Anaesthesia (Pharmacology) (Medical School)
Terry B. Strom, Professor of Surgery (Medical School)
Jack L. Strominger, Higgins Professor of Biochemistry in the Department of Stem Cell and Regenerative Biology
Kevin Struhl, David Wesley Gaiser Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Lynda Stuart, Assistant Professor of Pediatrics (Medical School)
Shamil R. Sunyaev, Associate Professor of Medicine (Medical School)
Jack Szostak, Professor of Chemistry and Chemical Biology; Professor of Genetics (Medical School)
Rudolph E. Tanzi, Joseph P. and Rose F. Kennedy Professor of Child Neurology and Mental Retardation (Medical School)
Daniel G. Tenen, Professor of Medicine (Medical School)
Cox Terhorst, Professor of Medicine (Pediatrics) (Medical School)
Sheila Thomas, Assistant Professor of Medicine (Medical School)
Alex Toker, Associate Professor of Pathology (Medical School)
George C. Tsokos, Professor of Medicine (Medical School)
Laurence A. Turka, Professor of Medicine (Medical School)
Naoshige Uchida, Associate Professor of Molecular and Cellular Biology
Dale T. Umetsu, Prince Turki bin Abdul Aziz al-Saud Professor of Pediatrics (Medical School)
Shobha Vasudevan, Assistant Professor of Medicine (Medical School)
Cheryl Denise Vaughan, Lecturer on Molecular and Cellular Biology
Marc Vidal, Professor of Genetics (Medical School)
Ulrich H. Von Andrian-Werburg, Edward Mallinckrodt Jr. Professor of Immunopathology (Medical School)
Jatin Mahesh Vyas, Assistant Professor of Medicine (Medical School)
Amy J. Wagers, Forst Family Professor of Stem Cell and Regenerative Biology
Denisa D. Wagner, Professor of Pathology (Medical School)
Gerhard Wagner, Elkan Blout Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Matthew K. Waldor, Professor of Medicine (Medical School)
Loren D. Walensky, Assistant Professor of Pediatrics (Medical School)
Bruce Walker, Professor in the Department of Immunology and Infectious Diseases (Medical School)
W. Allan Walker, Conrad Taff Professor of Pediatrics (Medical School)
Conrad Wall, Professor of Otology and Laryngology (Medical School)
Christopher A. Walsh, Bullard Professor of Pediatrics and Neurology (Medical School)
Johannes Walter, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Thomas Walz, Professor of Cell Biology (Medical School)
Da-Zhi Wang, Associate Professor of Pediatrics (Medical School)
Frederick C. Wang, Professor of Medicine (Medical School)
Matthew L. Warman, Harriet M. Peabody Professor of Orthopedic Surgery (Medical School)
Paula I. Watnick, Assistant Professor of Pediatrics (Medical School)
Wenyi Wei, Assistant Professor of Pathology (Medical School)
Howard L. Weiner, Robert L. Kroc Professor of Neurology (Medical School)
David Marc Weinstock, Assistant Professor of Medicine (Medical School)
Charles J. Weitz, Robert Henry Pfeiffer Professor of Neurobiology (Medical School)
Peter F. Weller, Professor in the Department of Immunology and Infectious Diseases (Medical School)
Michael R. Wessels, John F. Enders Professor of Pediatrics (Medical School)
Marianne Wessling-Resnick, Professor of Nutritional Biochemistry (Public Health)
Johnathan Whetstine, Assistant Professor of Medicine (Medical School)
Kristin White, Associate Professor of Dermatology (Medical School)
Morris F. White, Professor of Pediatrics (Medical School)
Malcolm Whitman, Professor of Developmental Biology (Dental School)
David Allen Williams, Leland Fikes Professor of Pediatrics (Medical School)
Ziv Williams, Assistant Professor of Surgery (Medical School)
Florian Winau, Assistant Professor of Microbiology and Immunobiology (Medical School)
Fred Winston, John Emory Andrus Professor of Genetics (Medical School)
Dyann F. Wirth, Richard Pearson Strong Professor of Infectious Disease (Public Health)
Michael S. Wolfe, Professor of Neurology (Medical School)
Wesley Philip Wong, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Clifford Woolf, Professor of Neurobiology (Medical School)
Catherine Ju-Ying Wu, Assistant Professor of Medicine (Medical School)
Chao-Ting Wu, Professor of Genetics (Medical School)
Hao Wu, Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Kai Wucherpfennig, Professor of Neurology (Medical School)
Ramnik Xavier, Associate Professor of Medicine (Medical School)
Catherine T. Yan, Assistant Professor of Pathology (Medical School)
Priscilla Yang, Assistant Professor of Microbiology and Molecular Genetics (Medical School)
Xinzhen Yang, Assistant Professor of Medicine (Medical School)
Bruce Yankner, Associate Professor of Neurology (Medical School)
Gary I. Yellen, Professor of Neurobiology (Medical School)
Junying Yuan, Professor of Cell Biology (Medical School)
Edmond J. Yunis, Professor of Pathology (Medical School)
Timur Yusufzai, Assistant Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Bruce R. Zetter, Charles Nowiszewski Professor of Cancer Biology in the Department of Surgery (Medical School)
Jean J. Zhao, Associate Professor of Biological Chemistry and Molecular Pharmacology (Medical School)
Jing Zhou, Associate Professor of Medicine (Medical School)
Qiao Zhou, Assistant Professor of Stem Cell and Regenerative Biology
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics
Leonard I. Zon, Professor of Stem Cell and Regenerative Biology and Grousbeck Professor of Pediatrics, Harvard Medical School (Medical School)
Lee Zou, Associate Professor of Pathology (Medical School)

The Division of Medical Sciences makes available to graduate students the facilities of the preclinical departments and research laboratories of the Harvard Medical School and its affiliated hospitals and institutions. The Division offers advanced courses and research in cell biology, biological chemistry and molecular pharmacology, genetics, immunology, microbiology and molecular genetics, neurosciences, pathology, physiology, and virology. Qualified undergraduates may be admitted with the permission of the instructor and the student’s department of concentration, as far as the facilities of the special laboratories permit. Inquiries should be addressed to the Division of Medical Sciences, Harvard Medical School, 260 Longwood Avenue, Boston, MA 02115, or telephone (617) 432-0162, email address dms@hms.harvard.edu.

For other courses in biological sciences, see listings of the Program in Biological Sciences in Public Health, Biophysics and Molecular and Cellular Biology.

**Biological and Biomedical Sciences (BBS)**

BBS is an interdepartmental graduate training program in cellular and molecular biology. BBS faculty members are drawn from all of the basic science departments of Harvard Medical School — Biological Chemistry and Molecular Pharmacology (BCMP), Cell Biology, Stem Cell and Regenerative Biology, Genetics, Microbiology and Immunobiology, Neurobiology and Systems Biology — and from many of Harvard’s affiliated teaching hospitals. BBS has also incorporated faculty from the Faculty of Arts and Sciences (FAS) as part of its effort to build new initiatives in graduate training.
Primarily for Graduates

**BBS 230** (formerly Microbiology 230). Analysis of the Biological Literature - *(New Course)*
Catalog Number: 36968
Michael Demian Blower (Medical School), Welcome W. Bender (Medical School), Dipanjan Chowdhury (Medical School), Nika Danial (Medical School), Elaine A. Elion (Medical School), Stephen J. Elledge (Medical School), J. Wade Harper (Medical School), Elizabeth Petri Henske (Medical School), Jonathan M. G. Higgins (Medical School), Jordan A. Kreidberg (Medical School), Cammie Lesser (Medical School), Danesh Moazed (Medical School), Adrian Salic (Medical School), David A. Sinclair (Medical School), Kevin Struhl (Medical School), Sheila Thomas (Medical School), David Marc Weinstock (Medical School), and Johnathan Whetstine (Medical School)
Students participate in intensive small group discussions focused on the critical analysis of basic research papers from a wide range of fields including biochemistry, cell and developmental biology, genetics, and microbiology. Papers are discussed in terms of their background, significance, hypothesis, experimental methods, data quality, and interpretation of results. Students will be asked to propose future research directions, to generate new hypotheses and to design experiments aimed at testing them.
*Note:* This course is required for first year BBS students. Students who are not first year BBS are welcome to contact the course director to determine if space is available and receive course materials in advance of class. For the midterm and final exams the students will be asked to submit written critiques of recent papers from the literature, with an emphasis on proposing new experimental directions to test the models proposed in the papers.

**Graduate Courses of Reading and Research**

*BBS 301. Teaching Practicum*
Catalog Number: 77888
David L. Van Vactor (Medical School) 2089 and members of the Departments
Half course (fall term). Hours to be arranged.
Course for TAs currently teaching in an approved BBS Core Course. Goals of this course: to better prepare TAs for the course they are working on, and to teach skills in instruction and curriculum planning.

*BBS 333r. Introduction to Research in Biological and Biomedical Sciences*
Catalog Number: 1206
David L. Van Vactor (Medical School) 2089
*Note:* BBS students register for lab rotations under this course number.

*BBS 380. Reading and Research in Biological and Biomedical Sciences*
Catalog Number: 0349
David L. Van Vactor (Medical School) 2089

**Biological Chemistry and Molecular Pharmacology**
All courses in Biological Chemistry and Molecular Pharmacology are subject to limitation in enrollment and will not be offered unless there is sufficient demand. For courses in Neuropharmacology, see listings under Neurobiology. For more courses in biochemistry, see other listings in the FAS Biological Sciences section.

**Primarily for Graduates**

**BCMP 200. Molecular Biology**
Catalog Number: 5591
Richard Ian Gregory (Medical School), Kami Ahmad (Medical School), Paul J. Anderson (Medical School), Joseph John Loparo (Medical School), Johannes Walter (Medical School), and Timur Yusufzai (Medical School)
Half course (fall term). M., W., F., 10:45-12:15.
An advanced treatment of molecular biology’s Central Dogma. Considers the molecular basis of information transfer from DNA to RNA to protein, using examples from eukaryotic and prokaryotic systems. Lectures, discussion groups, and research seminars.
*Note:* Offered jointly with the Medical School as BP 723.0.
*Prerequisite:* Intended primarily for graduate students familiar with basic molecular biology or with strong biology/chemistry background.

**BCMP 201. Biological Macromolecules: Structure, Function and Pathways**
Catalog Number: 5068
Stephen C. Blacklow (Medical School), Gaudenz Danuser (Medical School), Stephen C. Harrison (Medical School), and Peter K. Sorger (Medical School)
Macromolecular structure with emphasis on biochemistry, interactions and catalysis in cellular processes and pathways. Links between theory and observation will emerge from discussion of fundamental principles, computational approaches and experimental methods.
*Note:* The course is intended for all Division of Medical Sciences (DMS) graduate students and is open to advanced undergraduates. Offered jointly with the Medical School as BP 714.0.

**BCMP 213. Behavioral Pharmacology**
Catalog Number: 4782 Enrollment: Limited to 15.
Jack Bergman (Medical School) and Carol A. Paronis (Medical School)
Introduction to CNS pharmacology and behavior in seminar format. Effects of psychomotor stimulants, antischizophrenics, opioid analgesics, and antianxiety agents on behavior. Emphasis on methodology and pharmacological analysis; attention to tolerance, drug dependence/addiction.
*Note:* Offered jointly with the Medical School as BP 719.0.

**BCMP 218. Molecular Medicine**
Catalog Number: 2049 Enrollment: Limited to 35.
Irving M. London (Medical School), David E. Cohen (Medical School), and George Q. Daley (Medical School)
Half course (fall term). Tu., 1–3.
A seminar on various human diseases and their underlying genetic or biochemical bases. Primary scientific papers discussed. Lectures by faculty and seminars conducted by students, faculty supervision.

Note: Faculty mentors will guide student-led discussions of the papers. Jointly offered with the Medical School as HT 140.

Prerequisite: Molecular Biology and Biochemistry.

**BCMP 228. Macromolecular NMR**

Catalog Number: 3969

*Gerhard Wagner (Medical School) and James J. Chou (Medical School)*

*Half course (fall term). M., F., 2–3:30.*

Theory and practice of modern methods of macromolecular structure determination using multidimensional NMR.

Note: Given in alternate years. Offered jointly with the Medical School as BP 722.0. Classroom lectures on Mondays and Fridays. The course will include classroom lectures, practical training and hands-on problem solving. The latter includes basic aspects of spectrometer operation, computer-based assignment of protein NMR spectra and structure calculation.

**BCMP 230. Principles and Practice of Drug Development**

Catalog Number: 1295

*Stan Neil Finkelstein (Medical School) and Robert H. Rubin (Medical School)*

*Half course (fall term). Th., 3–6.*

Critical assessment of the major issues and stages of developing a pharmaceutical or biopharmaceutical. Drug discovery, preclinical development, clinical investigation, manufacturing and regulatory issues considered for small and large molecules. Economic considerations of the drug development process.

Note: Classes held at MIT.

**BCMP 234. Cellular Metabolism and Human Disease**

Catalog Number: 9644 Enrollment: May be limited

*Thomas Michel (Medical School) and Cheryl Denise Vaughan*

*Half course (spring term). M., W., F., 9-10:30.*

Cellular and organismal metabolism, with focus on interrelationships between key metabolic pathways and human disease states. Genetic and acquired metabolic diseases and functional consequences. Interactive lectures and critical reading conferences are integrated with clinical encounters.

Note: Also listed as MCB 234.

Prerequisite: Knowledge of introductory biochemistry, genetics, and cell biology required (MCB 52 and 54 or equivalent); one year of organic chemistry.

**BCMP 235. Principles of Human Disease: Physiology and Pathology**

Catalog Number: 3769 Enrollment: Course enrollment will be limited, with priority given to graduate students and a maximum of 10 undergraduates (priority given to seniors).

*Constance L. Cepko (Medical School), and members of the Medical School Faculty*

*Half course (fall term). M., W., F., 9-10:30.*

This course covers the normal physiology and pathophysiology of selected organs, through
lectures, readings, tutorials based on clinical cases, and patient presentations. Human biology is emphasized, with some examples also drawn from model organisms.

Prerequisite: Knowledge of introductory biochemistry, molecular biology, and cell biology required (MCB52 and MCB54 or equivalent and one year of organic chemistry for undergraduates).

Graduate Courses of Reading and Research

*BCMP 309. Regulation of Membrane Protein and Lipid Dynamics: Molecular Mechanisms and Biological Implications
Catalog Number: 1558
David E. Golan (Medical School) 1558

*BCMP 310. Molecular and Cellular Mechanisms of Insulin Action
Catalog Number: 4299
Morris F. White (Medical School) 3158

*BCMP 311. Structure and Dynamics of Macromolecular Assemblies
Catalog Number: 3623
Stephen C. Harrison (Medical School) 3597

*BCMP 312. Downregulating DNA Repair: Phosphatases & MicroRNAs
Catalog Number: 30165
Dipanjan Chowdhury (Medical School) 6266

*BCMP 313 (formerly Pathology 354). Biochemistry of transmembrane receptors and signaling - (New Course)
Catalog Number: 49628
Stephen C. Blacklow (Medical School) 1462

*BCMP 314. Protein NMR Spectroscopy of Membrane Protein
Catalog Number: 3449
James J. Chou (Medical School) 4950

*BCMP 315. Growth Factor Structure and Function
Catalog Number: 6034
Michael Klagsbrun (Medical School) 3167

*BCMP 316. Signal Transduction and Phosphorylation in Heart Disease
Catalog Number: 96794
Maria Irene Kontaridis (Medical School) 6398

*BCMP 317. Signal Transduction and Related Molecular Pathophysiology
Catalog Number: 3354
Steven E. Shoelson (Medical School) 3951
*BCMP 318. Innate Immunity Against RNA Viruses  
Catalog Number: 45272  
Sun Hur (Medical School) 6403

*BCMP 319. Histone Variants and Chromosome Biology  
Catalog Number: 1748  
Kami Ahmad (Medical School) 4592

*BCMP 320. Systems and Synthetic Biology  
Catalog Number: 0265  
Pamela A. Silver (Medical School) 1595

*BCMP 324. Structure and Replication of DNA  
Catalog Number: 5059  
Charles C. Richardson (Medical School) 2479

*BCMP 325. Genomic Instability and Cancer Susceptibility  
Catalog Number: 4110  
Alan D. D’Andrea (Medical School) 3532

*BCMP 328. Computational Analysis of Sequence Variation and Divergence  
Catalog Number: 2468  
Shamil R. Sunyaev (Medical School) 4671

*BCMP 329. Structure Biology of Cytoplasmic Signal Transduction  
Catalog Number: 5005  
Michael J. Eck (Medical School) 1739

*BCMP 331. Biochemistry and Biology of Neurodegenerative Diseases  
Catalog Number: 9727  
Michael S. Wolfe (Medical School) 4543

*BCMP 334. MicroRNA Functions in Cancers and Quiescence  
Catalog Number: 79343  
Shobha Vasudevan (Medical School) 6972

*BCMP 335. Biochemical and Genetic Analysis of Eukaryotic Gene Expression  
Catalog Number: 8052  
Stephen Buratowski (Medical School) 1790

*BCMP 337. Drosophila Molecular Genetics  
Catalog Number: 0782  
Welcome W. Bender (Medical School) 7083
*BCMP 338. Gene regulation in yeast and cancer  
Catalog Number: 0549  
*Kevin Struhl (Medical School) 7415

*BCMP 339. Regulation of the Cellular Uptake of Macromolecular Nutrients  
Catalog Number: 3453  
*Marianne Wessling-Resnick (Public Health) 1315

*BCMP 340. Biologically Active Small Molecules  
Catalog Number: 8300  
*Jon Clardy (Medical School) 4667

*BCMP 343. Molecular Genetics of Herpes Viruses  
Catalog Number: 0868  
*Donald M. Coen (Medical School) 7617

*BCMP 344. Molecular Pharmacology of Excitable Membranes  
Catalog Number: 0200  
*Gary R. Strichartz (Medical School) 7530

*BCMP 345. Transcription Factors in Hematopoiesis and Leukemogenesis  
Catalog Number: 4792  
*Alan B. Cantor (Medical School) 5150

*BCMP 348. Chromatin and Cancer  
Catalog Number: 6409  
*Charles M. Roberts (Medical School) 5151

*BCMP 349. Targeting Deregulated Apoptotic and Transcriptional Pathways in Cancer  
Catalog Number: 1071  
*Loren D. Walensky (Medical School) 5065

*BCMP 352. Chemical Mediators in Inflammation and Resolution  
Catalog Number: 4853  
*Charles N. Serhan (Medical School) 3163

*BCMP 353. Epigenomics and Chromatin Systems Biology  
Catalog Number: 8682  
*Yujiang Shi (Medical School) 5509

*BCMP 355. Transcriptional Control of Hematopoiesis and Leukemia  
Catalog Number: 4489  
*Hanno Reinhard Hock (Medical School) 5660
*BCMP 356. NMR Spectroscopy of Proteins and Metabolites  
Catalog Number: 8093  
_Gerhard Wagner (Medical School)_ 2626

*BCMP 358. Targeting Apoptosis Regulation in Cancer  
Catalog Number: 6735  
_Anthony G. Lettai (Medical School)_ 5663

*BCMP 359. Molecular Mechanisms of Signal Transduction  
Catalog Number: 8520  
_Elaine A. Elion (Medical School)_ 2941

*BCMP 360. Regeneration of Cartilage and Skeletal Muscle  
Catalog Number: 6934  
_Andrew B. Lassar (Medical School)_ 2946

*BCMP 361. X-Ray Crystallographic Studies of Viruses and Proteins  
Catalog Number: 4155  
_James M. Hogle (Medical School)_ 2943

*BCMP 362. Eukaryotic Survival Decisions  
Catalog Number: 4972  
_David E. Fisher (Medical School)_ 1800

*BCMP 363. Normal cell division mechanisms and cell division defects in cancer  
Catalog Number: 4981  
_David Pellman (Medical School)_ 3702

*BCMP 366. Stem Cells in Disease and Development  
Catalog Number: 9236  
_George Q. Daley (Medical School)_ 4951

*BCMP 370. Advanced Topics in Biological Chemistry and Molecular Pharmacology  
Catalog Number: 0482  
_David Lopes Cardozo (Medical School)_ 5995  
A series of reading and discussion seminars, each running for a half term (7 weeks). Two seminars, which can be taken in different terms, are required for credit.  
_Note:_ Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*BCMP 371. Maintenance of genome stability in S phase  
Catalog Number: 3739  
_Johannes Walter (Medical School)_ 3846
*BCMP 375. Biomolecular Nanotechnology
Catalog Number: 3288
William Shih (Medical School) 5256

*BCMP 376. Mechanisms of Action of Antibiotics
Catalog Number: 3033
Daniel E. Kahne 5065

*BCMP 377. Quantitative Proteomics of Cancer Progression
Catalog Number: 5225
Jarrod Marto (Medical School) 5326

*BCMP 378. Mechanisms of Hepatic Cholesterol Elimination
Catalog Number: 6669
David E. Cohen (Medical School) 3478

*BCMP 379. Biochemical and Molecular Regulation of Vascular Growth
Catalog Number: 9374
Marsha Moses (Medical School) 5388

*BCMP 381. Functional Small Molecules for Biological Discovery
Catalog Number: 8841
Nathanael Gray (Medical School) 5730

*BCMP 382. Mechanisms of RNAi in Stem Cells
Catalog Number: 9601
Richard Ian Gregory (Medical School) 5743

*BCMP 383. Integrated and Functional Genomic Studies of Human Cancer
Catalog Number: 5334
Levi Alexander Garraway (Medical School) 6203

*BCMP 384. Embryonic stem cells, Nuclear Transfer, Cancer, Reprogramming
Catalog Number: 5330
Konrad Hochedlinger (Medical School) 6101

*BCMP 385 (formerly Pathology 316). Control of Gene Expression in Tumorigenesis and Differentiation
Catalog Number: 59773
Thomas M. Roberts (Medical School) 7729

*BCMP 386 (formerly Pathology 387). Kinase Signaling in Cancer
Catalog Number: 23358
Jean J. Zhao (Medical School) 6237
*BCMP 387. Single-molecule Biophysics and Force Spectroscopy - (New Course)  
Catalog Number: 47527  
*Wesley Philip Wong (Medical School) 6463

*BCMP 388. Single-molecule studies of DNA repair  
Catalog Number: 19862  
*Joseph John Loparo (Medical School) 6798

*BCMP 389. Chromatin and DNA Dynamics  
Catalog Number: 86491  
*Timur Yusufzai (Medical School) 6953

*BCMP 390. Gene Regulation Studied with Small Molecules  
Catalog Number: 87028  
*James Elliott Bradner (Medical School) 6542

*BCMP 391. Redox biology, trace elements and aging  
Catalog Number: 82614  
*Vadim Gladyshev (Medical School) 3401

*BCMP 392. Genomic and Epigenomic Susceptibility to Cancer  
Catalog Number: 35506  
*Aditi Hazra (School of Public Health) 2913

**Quarter Courses for Graduate Students Only**

*BCMP 300qc. Advanced Topics in Biological Chemistry and Molecular Pharmacology  
Catalog Number: 69187  
*David Lopes Cardozo (Medical School) 5995  
A series of reading and discussion seminars, each running for a half term (7 weeks).  
*Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*BCMP 301qc. Translational Pharmacology  
Catalog Number: 97487 Enrollment: Enrollment may be limited.  
*Donald M. Coen (Medical School) 7617 and David E. Golan (Medical School)  
Quarter course (spring term).  
Intensive January course covering basic principles of pharmacology and how they are translated into the development of new drugs. Meets for 10 days in January.  
*Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*BCMP 302qc. Molecular Movies: Introduction to 3D Visualization with Maya  
Catalog Number: 45965 Enrollment: Limited to 8. Will accept up to 12 auditors.  
*David Lopes Cardozo (Medical School) 5995 and Members of the Department
Quarter course (fall term). F., 9–12.
Introduction to advanced scientific visualization techniques using leading 3D software packages Maya and Molecular Maya. Focus will be placed on adapting existing 3D modeling/animation tools for purposes of visualizing biological processes.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*BCMP 303qc. Molecular Movies: Advanced 3D Visualization with Maya
Catalog Number: 61072 Enrollment: Limited to 18.
David Lopes Cardozo (Medical School) 5995
Quarter course (spring term). F., 9–12.
Explore Maya’s vast visualization toolset. Advanced techniques in each of the phases of the 3D production pipeline will be presented including dynamics systems like Hair, nCloth, nParticles and PaintFx. Introduction to Maya’s Embedded Language (MEL).
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.
Prerequisite: Molecular Movies: Introduction to 3D Visualization with Maya required.

*BCMP 307qc. Approaches to Drug Action, Discovery, and Design
Catalog Number: 52371 Enrollment: May be limited.
Nathanael Gray (Medical School) 5730, and members of the Department
Quarter course (spring term). Tu., Th., 3:30–5.
Application of molecular, systems, and structural biology, genetics, genomics, enzymology, and chemistry to development of new therapies. Examples drawn from diseases including cancer and AIDS. Students write and present proposals for discovery of new therapeutics.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*BCMP 308qc. Cell Fate Decisions in Development and Disease - (New Course)
Catalog Number: 21552 Enrollment: Limited to 10.
Alan B. Cantor (Medical School) 5150
Quarter course (fall term). W., 2–4.
This quarter course will offer students an in-depth examination of current knowledge regarding mechanisms of cell fate decisions. In addition, it will examine these processes in the context of developmental cell plasticity, cellular reprogramming, and cancer. This will primarily be a literature-based course, with examination and discussion of key studies in the field. Concepts involving transcription factor networks, transcription factor cross-antagonism, feedback loops, lineage priming, lineage identity maintenance, mitotic bookmarking, epigenetics, Notch signaling, cytokine signaling, and microRNAs will be explored. These ideas will be examined in the context of a number of different tissue systems including blood, breast, lung, and gastrointestinal tract.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*BCMP 309qc. Principles of Drug Action in Man - (New Course)
Catalog Number: 63265
Timothy J. Mitchison (Medical School) 3713
Quarter course (spring term). Tu., Th., 3:30–5.
This course pairs with BCMP 307qc. Approaches to Drug Action, Discovery, and Design.

**Cell Biology**

**Primarily for Graduates**

**Cell Biology 201. Molecular Biology of the Cell**
Catalog Number: 1044
Marcia C. Haigis (Medical School)
Half course (spring term). M., W., 10:30-12, and sections F., at 10:30-12.
Molecular basis of cellular compartmentalization, protein trafficking, cytoskeleton dynamics, mitosis, cell locomotion, cell cycle regulation, signal transduction, cell-cell interaction, cell death, and cellular/biochemical basis of diseases.
**Note:** Methodological focus on current approaches in cell biology including quantitative tools. Emphasis on experimental design. Offered jointly with the Medical School as CB 713.0.
**Prerequisite:** Basic knowledge in biochemistry, genetics and cell biology.

**Cell Biology 207. Developmental Biology: Molecular Mechanisms of Vertebrate Development**
Catalog Number: 2044 Enrollment: Limited to 25.
Andrew B. Lassar (Medical School), Patricia A. D’Amore (Medical School), John G. Flanagan (Medical School), Wolfram Goessling (Medical School), Jordan A. Kreidberg (Medical School), Richard L. Maas (Medical School), Trista Elizabeth North (Medical School), Clifford J. Tabin (Medical School), and Malcolm Whitman (Dental School)
Analyzes the developmental programs of frog, chick, zebrafish, and mouse embryos, emphasizing experimental strategies for understanding the responsible molecular mechanisms that pattern the vertebrate embryo. Morphogenesis, organogenesis, stem cells and regeneration will also be discussed.
**Note:** Offered jointly with the Medical School as CB 710.0. Includes lectures and conference sessions in which original literature is discussed in depth. Short research proposals are required in lieu of exams.

[Cell Biology 211 (formerly Cell Biology 211a). Molecular and Systems Level Cancer Cell Biology]
Catalog Number: 5771
Piotr Sicinski (Medical School), Jarrod Marto (Medical School), and Marc Vidal (Medical School)
Half course (spring term). M., W., 12–1:30.
Examines the molecular basis of cancer formation including alterations in signal transduction pathways, cell cycle machinery, cell metabolism and apoptosis. Describes novel systems biology proteomic approaches to study cancer cell interactomes.
**Note:** Expected to be given in 2013–14. Given alternate years with Cell Biology 212. Offered
Cell Biology 212 (formerly Cell Biology 211b), Biology of the Cancer Cell
Catalog Number: 4169
David A. Frank (Medical School) and Jean J. Zhao (Medical School)
This semester long course takes a molecular approach to examine the basis of human cancer. The main concepts that we will cover include: tumor suppressor genes and oncogenes, signal transduction, DNA damage and repair, angiogenesis, metastasis and invasion, and apoptosis. Lectures will be delivered by experts in the various fields of Cancer Biology research to provide an integrated perspective on past, current and future approaches in Cancer Biology Research.
Note: Given alternate years with Cell Biology 211.
Prerequisite: Advanced biochemistry, molecular genetics, and cell biology.

[Cell Biology 225. Hormonally Active Pollutants and Human Disease]
Catalog Number: 94802
Joan V. Ruderman (Medical School)
surprising number of environmental pollutants can mimic or interfere with developmental and physiological effects of hormones. This course examines landmark discoveries and legislation, and emphasizes current work in this emerging area.
Note: Expected to be given in 2013–14. Intended for interested students from all concentrations.

Catalog Number: 8747 Enrollment: Limited to 12.
Iain A. Drummond (Medical School) and N. Nanda Nanthakumar (Medical School)
Explores developmental mechanisms through the life cycle, contrasting pluripotency and cell fate restriction in embryos and adult tissues. In depth analysis of in vivo approaches, with emphasis on adult stem cells, tissue repair and self-renewal.
Note: Offered jointly with the Medical School as CB 721.0. For more information visit: Massachusetts General Hospital and select CB 226.
Prerequisite: Upper division cell biology or equivalent.

Graduate Courses of Reading and Research

*Cell Biology 300. Advanced Topics in Cell, Molecular, and Developmental Biology
Catalog Number: 5825
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (seven weeks). Different topics are covered each term.
Note: Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.
*Cell Biology 305. Bone Cells Differentiation, Function and Signaling  
Catalog Number: 60379  
Roland Elie Baron (Dental School) 6397

*Cell Biology 306. Chromatin Dynamics in metabolism and DNA repair  
Catalog Number: 75486  
Raul Mostoslavsky (Medical School) 6402

*Cell Biology 307. Cell-cell signaling in neural development and regeneration  
Catalog Number: 1911  
John G. Flanagan (Medical School) 3149

*Cell Biology 308. Membrane Biology  
Catalog Number: 6173  
Dennis A. Ausiello (Medical School) 1288

*Cell Biology 310. Mechanisms of Vertebrate Hedgehog Signaling  
Catalog Number: 9189  
Adrian Salic (Medical School) 5351

*Cell Biology 311. Cardiovascular Signal Transduction  
Catalog Number: 9196  
Thomas Michel (Medical School) 4392

*Cell Biology 312. Molecular Mechanisms of Transcriptional Control  
Catalog Number: 8538  
Anders Michael Naar (Medical School) 4328

*Cell Biology 313. Systems Biology of Mammalian Signal Transduction  
Catalog Number: 23964  
Peter K. Sorger (Medical School) 5544

*Cell Biology 314. Molecular Biology of Extracellular Matrix  
Catalog Number: 5077  
Bjørn R. Olsen (Medical School) 1164

*Cell Biology 316. Mechanism and Function of Intracellular Protein Turnover  
Catalog Number: 1017  
Alfred L. Goldberg (Medical School) 2827

*Cell Biology 317. Mechanisms of Programmed Cell Death  
Catalog Number: 2270  
Junying Yuan (Medical School) 2105
*Cell Biology 318. Molecular Biology of Cell Growth Regulation and Transformation  
Catalog Number: 3355  
John Blenis (Medical School) 2612

*Cell Biology 319 (formerly Pathology 368). Signaling Pathways in Cancer Cell Biology -  
(New Course)  
Catalog Number: 71626  
Alex Toker (Medical School) 4971

*Cell Biology 321. Neuronal Pathfinding and Synaptogenesis  
Catalog Number: 4841  
David L. Van Vactor (Medical School) 2089

*Cell Biology 324. Tissue-specific Leukocyte Trafficking in Health and Disease  
Catalog Number: 42928  
Jorge Rodrigo Mora (Medical School) 6966

*Cell Biology 325. Molecular and Cellular Regulators of Cancer Progression  
Catalog Number: 27821  
Sandra McAllister (Medical School) 3226

*Cell Biology 326. Signal Transduction During Early Development  
Catalog Number: 1872  
Malcolm Whitman (Dental School) 3267

*Cell Biology 328. Receptor-Mediated Endocytosis  
Catalog Number: 0438  
Tomas Kirchhausen (Medical School) 1155

*Cell Biology 329. The Ubiquitin-Proteasome Pathway  
Catalog Number: 6826  
Daniel Finley (Medical School) 2313

*Cell Biology 331. Mechanochemical cell signaling  
Catalog Number: 86511  
Gaudenz Danuser (Medical School) 6527

*Cell Biology 332. Mass Spectrometry and Proteomics  
Catalog Number: 1568  
Steven P. Gygi (Medical School) 3939

*Cell Biology 333. Electron Microscopic Structure Determination  
Catalog Number: 9254  
Thomas Walz (Medical School) 3778
*Cell Biology 335. Signal Transduction  
Catalog Number: 2542  
*Lewis C. Cantley (Medical School) 1287*

*Cell Biology 336. Signal Transduction in Normal and Transformed Cells  
Catalog Number: 6833  
*Joan S. Brugge (Medical School) 1486*

*Cell Biology 339. Cell Morphogenesis and Regulation  
Catalog Number: 3898  
*Marc W. Kirschner (Medical School) 1078*

*Cell Biology 340. Dissection of Angiogenic Signaling in Zebrafish  
Catalog Number: 7792  
*Joanne Chan (Medical School) 5391*

*Cell Biology 342. Cytoskeleton in Development and Cancer  
Catalog Number: 4059  
*Sheila Thomas (Medical School) 3777*

*Cell Biology 343. Mechanisms of Mammalian Cell Differentiation and Gene Expression  
Catalog Number: 0202  
*Bruce M. Spiegelman (Medical School) 7733*

*Cell Biology 344. Molecular Mechanism of Signal Transduction  
Catalog Number: 6093  
*Xi He (Medical School) 2004*

*Cell Biology 345. Protein Transport Across the Endoplasmic Reticulum Membrane  
Catalog Number: 6793  
*Tom Rapoport (Medical School) 1815*

*Cell Biology 346. Molecular Basis of Human Disease  
Catalog Number: 1591  
*Andrius Kazlauskas (Medical School) 2088*

*Cell Biology 347. Cellular and Molecular Aspects of Insulin Action  
Catalog Number: 1494  
*C. Ronald Kahn (Medical School) 2019*

*Cell Biology 349. Gene Silencing and Chromosome Structure  
Catalog Number: 8765  
*Danesh Moazed (Medical School) 4254*
*Cell Biology 351. Cardiovascular Stem Cells in Development and Disease
Catalog Number: 7604
Kenneth R. Chien 5667

*Cell Biology 354. Basic and Applied Mechanisms of Intracellular Transport
Catalog Number: 7605
Victor Wee Hsu (Medical School) 2606

*Cell Biology 356. Cell Growth Regulation, Telomere Maintenance, Cancer and Alzheimer’s Disease
Catalog Number: 3718
Kun Ping Lu (Medical School) 2607

*Cell Biology 358. Mechanisms of Tumor Metastasis
Catalog Number: 0606
Bruce R. Zetter (Medical School) 7737

*Cell Biology 359. Intracellular Signaling Pathways in the Regulation of Cell Growth and Differentiation
Catalog Number: 0335
David A. Frank (Medical School) 3276

*Cell Biology 360. Genetic Control of Apoptosis in Drosophila
Catalog Number: 6046
Kristin White (Medical School) 3955

*Cell Biology 361. Matrix Biology, Cell-Matrix Interactions in Health and Disease
Catalog Number: 5561
Raghu Kalluri (Medical School) 4945
Half course (fall term). Hours to be arranged.

*Cell Biology 364. The Structure of the Nucleus and the Dynamics of Nuclear Transport
Catalog Number: 3582
Frank D. McKeon (Medical School) 1990

*Cell Biology 365 (formerly Pathology 370). Mechanism and biology of ubiquitin-like protein conjugation cascades
Catalog Number: 96188
J. Wade Harper (Medical School) 4957

*Cell Biology 366 (formerly Pathology 379). Mitochondria in Aging and Metabolism
Catalog Number: 44666
Marcia C. Haigis (Medical School) 5734
*Cell Biology 370. Mitotic Kinases, Chromatin and Chromosome Segregation  
Catalog Number: 0661  
Jonathan M. G. Higgins (Medical School) 5543

*Cell Biology 371. Nutrient Sensing and Metabolic Control  
Catalog Number: 5804  
Pere B. Puigserver (Medical School) 5735

*Cell Biology 372. Cytoskeletal Dynamics  
Catalog Number: 5032  
Timothy J. Mitchison (Medical School) 3713

*Cell Biology 373. Molecular Genetics of Cell Interaction in Development  
Catalog Number: 8133  
Spyros Artavanis-Tsakonas (Medical School) 2609

*Cell Biology 374. Cell-extracellular matrix interaction in brain development and malformation - (New Course)  
Catalog Number: 35175  
Xianhua Piao (Medical School) 7046

*Cell Biology 375. Cancer Genetics and DNA  
Catalog Number: 26444  
David Marc Weinstock (Medical School) 6929

*Cell Biology 376. Chemical Approaches to Cell Division and Cancer  
Catalog Number: 7680  
Randy King (Medical School) 3941

*Cell Biology 377. Islet cell signaling mechanisms, Stem cells, iPS Cells in diabetes  
Catalog Number: 7966  
Rohit N. Kulkarni (Medical School) 5152

*Cell Biology 378. Bacterial Toxin Entry and Immunoglobulin Transport in Mucosal Epithelial Cells  
Catalog Number: 7656  
Wayne I. Lencer (Medical School) 5153

*Cell Biology 379. BMP Signaling in Organogenesis  
Catalog Number: 2894  
Vicki Rosen (Dental School) 4790

*Cell Biology 380. Cytoskeletal Mechanics of Blood Platelet Production  
Catalog Number: 9706  
Joseph E. Italiano (Medical School) 5392
*Cell Biology 381. Molecular Mechanism of Microtubule-based Motility  
Catalog Number: 8578  
*Samara Louise Reck-Peterson (Medical School) 6165

*Cell Biology 382. Regulation of Rho GTPases by synaptopodin - (New Course)  
Catalog Number: 16967  
*Peter Hermann Mundel (Medical School) 7040

*Cell Biology 383. Molecular Biology of Instinctive Animal Behavior  
Catalog Number: 8119  
*Stephen Daniel Liberles (Medical School) 6159

*Cell Biology 384. Molecular Biology of Insulin and Leptin Receptor Signaling Systems in Obesity  
Catalog Number: 50613  
*Umut Ozcan (Medical School) 2557

*Cell Biology 385. Epigenetic mechanisms and genomic integrity - (New Course)  
Catalog Number: 72714  
*Mohammad Motamedi (Medical School) 7039

*Cell Biology 386. Systemic metabolism and cancer - (New Course)  
Catalog Number: 41321  
*Nada Y. Kalaany (Medical School) 7026

*Cell Biology 387. Calcium signaling in health and disease - (New Course)  
Catalog Number: 81727  
*Anna Greka (Medical School) 7021

*Cell Biology 389 (formerly *Pathology 380). Modeling ovarian cancer pathogenesis and early detection  
Catalog Number: 97721  
*Ronny I. Drapkin (Medical School) 5912

*Cell Biology 390 (formerly *Pathology 351). Membrane:cytoskeleton interface in morphogenesis and tumorigenesis/metastasis  
Catalog Number: 31092  
*Andrea I. McClatchey (Medical School) 2204

*Cell Biology 399. Nanocourses  
Catalog Number: 0087  
David Lopes Cardozo (Medical School) 5995 and Spyros Artavanis-Tsakonas (Medical School) 2609

Quarter Courses for Graduate Students Only
*Cell Biology 300qc. Advanced Topics in Cell, Molecular, and Developmental Biology
Catalog Number: 17665
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks).
*Note:* Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Cell Biology 301qc. The Epidemiology and Molecular Pathology of Cancer
Catalog Number: 24657
Massimo Loda (Medical School) 6857 and Lorelei Ann Mucci (Medical School)
Quarter course (spring term). M. through F., 9:30–5.
In-depth introduction to the epidemiology and molecular pathology of cancer. We will explore multiple cancer types including prostate, breast, colon, lung and brain, through a series of lectures and hands-on labs and tutorials.
*Note:* This is a January course. Expected to be offered 15 - 24, 2013. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 302qc. Advanced Experimental Design for Biologists
Catalog Number: 91286 Enrollment: Limited to 24.
Randy King (Medical School) 3941 and David Jonathan Glass (Medical School)
Quarter course (spring term). Tu., Th., 4–6.
Theory and practice of experimental design. Build on principles from experimental design boot camp. Conducted in workshop setting to apply those principles to current student projects. Emphasis placed on interpretation and strategic project planning.
*Note:* More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 304qc. Introduction to Human Gross Anatomy
Catalog Number: 61023 Enrollment: Limited to 10.
David Lopes Cardozo (Medical School) 5995
Quarter course (fall term; repeated spring term). Fall: M., W., F., 1–5.
Lectures, laboratory dissections, and prosections to explore the gross structure and function of the human body. Provide a foundation to acquire practical skills in recognizing, dissecting, and differentiating key anatomical structures.
*Note:* Open to graduate students only. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Cell Biology 305qc. Intracellular transport*
Catalog Number: 61228
Victor Wee Hsu (Medical School) and invited faculty
Quarter course (fall term). W., 2–4.
This course will provide a practical guide to understanding vesicular transport. Key elements of this process, and also interdisciplinary areas that exemplify physiologic roles played by this fundamental process, will be selected for discussion.
Note: Expected to be given in 2013–14. Offered in alternate years. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 306qc. Teaching 100: The Theory and Science of Teaching
Catalog Number: 62351 Enrollment: Limited to 15.
David L. Van Vactor (Medical School) 2089
Quarter course (fall term). Th., 2–4:30.
The Theory and Science of Teaching focuses on understanding why certain teaching methods are effective by examining the scientific research and theoretical frameworks that support classroom methods. Topics to be covered include: the nature of knowledge, Bloom’s Taxonomy (including the Cognitive, Affective, and Psychomotor domains), how active learning and contextualization increase student learning, as well as the theory behind critical thinking skills and problem solving. Classroom sessions will be broken up into part lecture and part in-class activities.
Note: The course has been designed as a companion to Genetics 302qc: Teaching 101, but neither course is a prerequisite of the other. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 307qc. Molecular Aspects of Chromatin Dynamics
Catalog Number: 91774 Enrollment: Limited to 25.
Raul Mostoslavsky 6402, Danesh Moazed (Medical School), Johnathan Whetstine (Medical School), and Lee Zou (Medical School), and members of the Department
Quarter course (spring term). Tu., 3–5.
Discuss chromatin dynamics in modulating cellular processes. Cover molecular mechanisms that regulate chromatin dynamics. How chromatin itself modulates biological processes, including mechanisms of inheritance. Discuss DNA methylation, histone modifications, nucleosome dynamics and novel epigenetic modulators.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 308qc. Introduction to Histology
Catalog Number: 38084 Enrollment: Limited to 11.
Adrian Salic (Medical School) and Stephen Daniel Liberles (Medical School)
Quarter course (spring term). Hours to be arranged.
The study of structure and how structure relates to function, in cells and tissues.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Cell Biology 309qc. Advanced Topics in Cell Biology - (New Course)
Catalog Number: 14797
David L. Van Vactor (Medical School) and members of the faculty
Quarter course (spring term). Tu., 6–7:30 p.m.
Seminar Theme: Controlling Cellular Behavior and Metabolism through Cell Interaction and Signaling. Review articles assigned each week to prepare students for discussion.
2012-2013 Previous Courses of Instruction

*Cell Biology 310qc. Current Topics in Cancer Biology Research - (New Course)*
Catalog Number: 60742
Chuck Stiles (Medical School) 4828, Karen Cichowski (Medical School) 3932, and Andi McClatchey (Medical School) 2204
This course is designed for mid- to upper-year graduate students that are interested in Current Topics in Cancer Biology research. Leading and cutting edge technologies in Cancer Biology Research are explored in-depth using recent papers of high profile in a round-table discussion format. Topics include: Cancer Cell Signaling, Metastasis and EMT, Cancer Genomics, Cancer and microRNAs and Cancer Stem Cells.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

**Developmental and Regenerative Biology**

**Graduate Course**

*DRB 310. Blood Stem Cell Development and Regeneration*
Catalog Number: 35575
Trista Elizabeth North (Medical School) 6515

*DRB 311. Cardiovascular Stem Cell Biology*
Catalog Number: 50682
Caroline Erter Burns (Medical School) 6516

*DRB 312. Epigenetic Modifications and Cellular Identity*
Catalog Number: 65789
Alexander Meissner 6702

*DRB 313. Liver Development, Regeneration and Carcinogenesis*
Catalog Number: 14267
Wolfram Goessling (Medical School) 6563

*DRB 314. Molecular and Developmental Neurobiology*
Catalog Number: 80896
Paola Arlotta 6703

*DRB 315. Environmental Signaling, Plasticity and Fate Specification during Development*
Catalog Number: 29374
Susan Mango 6386

*DRB 316. Stem Cells and Organ Size Control*
Catalog Number: 96003
Fernando D. Camargo 6401
*DRB 317. Stem cells, Cancer, and Hematological Disorders
Catalog Number: 44481
Catherine T. Yan (Medical School) 6517

*DRB 318. Adult hippocampal neurogenesis, cognition and affective behaviors - (New Course)
Catalog Number: 18357
Amar Sahay (Medical School) 7195

*DRB 319. Adult mammalian regeneration
Catalog Number: 45223
Qiao Zhou 6578

*DRB 320. Lung Regeneration and Lung Disease
Catalog Number: 42137
Jayaraj Rajagopal (Medical School) 6762

*DRB 321. Stem Cells and Neurodegenerative Disease
Catalog Number: 30604
Lee L. Rubin 6061

*DRB 322. Regulation of tissue stem cells
Catalog Number: 80827
David T. Breault (Medical School) 2595

*DRB 323. Myocardial regeneration, heart muscle cell proliferation
Catalog Number: 29305
Bernhard Kuhn (Medical School) 2605

*DRB 324. Adult skeletal muscle stem cell regulation - (New Course)
Catalog Number: 88077
Andrew Stephen Brack (Medical School) 7008

*DRB 325 (formerly Pathology 371). Biology and Function of Tissue-Specific Stem Cells - (New Course)
Catalog Number: 85039
Amy J. Wagers 5212

*DRB 326 (formerly Pathology 385). Epigenetic Regulation by Large Non-coding RNA - (New Course)
Catalog Number: 14839
John L. Rinn 6229

*DRB 330qc (formerly *DRB 330). Advanced Experimental Methods: Experimental Approaches to Developmental Biology
Catalog Number: 6590 Enrollment: Limited to 16.
Paola Arlotta 6703, and members of the Department
Quarter course (spring term). M. through Sa., 9–9 p.m. over two and a half week period in January.
Provides a rapid survey of major topics and themes in developmental biology in parallel with hands-on exposure to a variety of experimental approaches, technologies and model systems (Drosophila, C. elegans, Xenopus, chick & mouse).
Note: Open to first-year and second-year BBS students; permission of instructor required. Not repeatable for credit.

Quarter Course for Graduate Students Only

[*DRB 301qc. Invertebrate Developmental Biology]*
Catalog Number: 32645
Norbert Perrimon (Medical School)
Quarter course (fall term). Th., 3–5.
Explore application of genetic tools in model systems for the analysis of developmental events. Focus on developmental genetics of Drosophila, C. elegans, and mouse to provide a background in methods of in vivo genetic analysis.
Note: Expected to be given in 2013–14. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

Genetics

Primarily for Graduates

**Genetics 201. Principles of Genetics**
Catalog Number: 4225
Fred Winston (Medical School), Thomas G. Bernhardt (Medical School), Maxwell G. Heiman (Medical School), Mitzi I. Kuroda (Medical School), and Steven A. McCarroll (Medical School)
An in-depth survey of genetics, beginning with basic principles and extending to modern approaches and special topics. We will draw on examples from various systems, including yeast, Drosophila, C. elegans, mouse, human and bacteria.
Note: Intended for first-year graduate students. Offered jointly with the Medical School as GN 701.0.

**Genetics 202. Human Genetics**
Catalog Number: 8064 Enrollment: Limited to 30.
Matthew L. Warman (Medical School) and members of the Department
This course examines genetic principles and experimental approaches for addressing fundamental questions about human variation, history, health, and disease. Each session is comprised of a lecture followed by a class discussion.
Prerequisite: Genetics 201 (or permission of the instructor) and basic knowledge of probability and statistics. Familiarity with bioinformatics and computational tools will be useful, but tutorial assistance will be provided where necessary.
[Genetics 216. Advanced Topics in Gene Expression]
Catalog Number: 2244
Robert E. Kingston (Medical School) and Fred Winston (Medical School)
Covers both biochemical and genetic studies in regulatory mechanisms. Small number of topics discussed in depth, using the primary literature. Topics range from prokaryotic transcription to eukaryotic development.
Note: Expected to be given in 2013–14. Offered jointly with the Medical School as GN 703.0.
Prerequisite: BCMP 200 and Genetics 201.

Genetics 219. Inheritance and Weird Stuff
Catalog Number: 14189
Chao-Ting Wu (Medical School), Kami Ahmad (Medical School), Steven A. McCarroll (Medical School), and David E. Reich (Medical School)
Half course (fall term). Tu., 10-1.
Focus on patterns of inheritance, including those that were once considered extraordinary but are now recognized as paradigms spanning fungi to humans. Expectations: questions, ideas, conversation during class. No tests, problem sets, or papers.
Prerequisite: Primarily for first-year graduate students, but is open to medical students and advanced undergraduates. A basic understanding of genetics recommended.

Genetics 220. Molecular Biology and Genetics in Modern Medicine
Catalog Number: 4660
Anne Giersch (Medical School)
Half course (fall term). F., 9:30-12:30, Tu., 2-5.
Scientific, clinical, ethical aspects of modern human genetics and molecular biology as applied to medicine. Covers genetic approaches and molecular underpinnings of inherited diseases, gene discovery, and cancer genetics, integrated with patient presentations, discussions.
Note: Offered jointly with the Medical School as HT 160.

Genetics 228. Genetics in Medicine - From Bench to Bedside
Catalog Number: 9840
Susan A. Slaugenhaupt (Medical School) and Christopher Holmes Newton-Cheh (Medical School)
Focus on translational medicine: the application of basic genetic discoveries to human disease. Will discuss specific genetic disorders and the approaches currently used to speed the transfer of knowledge from the laboratory to the clinic.
Note: Course will include patient presentations and lectures by investigators known for their work in a specific disease area. Course will be held at MGH (transportation provided to MGH). Offered jointly with the Medical School as GN 711.0. For more information visit the Massachusetts General Hospital.
Prerequisite: Genetics 201 or equivalent.

[*Genetics 229. Computational Statistics for Biomedical Sciences]*
Catalog Number: 55994
Peter J. Park (Medical School)
Half course (fall term). Th., 1–4.
Practical introduction to analysis of biological and biomedical data. Basic statistical techniques covered, including descriptive statistics, elements of probability, hypothesis testing, nonparametric methods, correlation analysis, and linear regression. Emphasis on choosing appropriate statistical tests.
Note: Expected to be given in 2013–14. Offered jointly with Medical School as BMI713.0.

Graduate Courses of Reading and Research

*Genetics 300. Advanced Topics in Genetics
Catalog Number: 1037
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (seven weeks). Different topics are covered each term.
Note: Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Genetics 303. Molecular Biology of Pathogenesis
Catalog Number: 1972
Frederick Ausubel (Medical School) 4639

*Genetics 304. Molecular Genetics Basis of Human Disease, Particularly Cardiovascular Pathogenesis
Catalog Number: 0693
Christine E. Seidman (Medical School) 3013

*Genetics 305. Centrosomes, Cilia, Cysts and Diseases
Catalog Number: 9027
Jing Zhou (Medical School) 3779

*Genetics 306. Inherited Human Disorders
Catalog Number: 7324
Jonathan G. Seidman (Medical School) 7529

*Genetics 308. Molecular Biology of Signal Transduction
Catalog Number: 5616
Brian Seed (Medical School) 7619

*Genetics 309. Gene Expression in Yeast
Catalog Number: 3763
Fred Winston (Medical School) 7877
*Genetics 310. Molecular Genetics of Neural Development and Gene Therapy to Prevent Blindness  
Catalog Number: 6324  
*Constance L. Cepko (Medical School) 1150

*Genetics 311. Molecular Mechanisms of Transcription Regulation in Mammals  
Catalog Number: 7310  
*Robert E. Kingston (Medical School) 1153

*Genetics 312. Molecular Genetics of Development  
Catalog Number: 8363  
*Gary B. Ruvkun (Medical School) 1366

*Genetics 313. Genomic Approaches to Human Disease Genetics  
Catalog Number: 6059  
*David M. Altshuler (Medical School) 4307

*Genetics 314. Structure and Activities of Ribozymes  
Catalog Number: 7244  
*Jack Szostak (Medical School) 7096

*Genetics 315. Molecular Genetics of Inherited Disorders  
Catalog Number: 3362  
*James Gusella (Medical School) 1152

*Genetics 316. Transcription Factors and DNA Regulatory Elements  
Catalog Number: 2247  
*Martha L. Bulyk (Medical School) 4259

*Genetics 317. Signaling Networks in Development and Disease  
Catalog Number: 2271  
*Jordan A. Kreidberg (Medical School) 2080

*Genetics 318. Genome Structure  
Catalog Number: 5012  
*George M. Church (Medical School) 1608

*Genetics 320. Genetics of Common Human Disease  
Catalog Number: 39071  
*Mark Joseph Daly (Medical School) 6519

*Genetics 321. Genetic Analysis of Growth and Homeostasis  
Catalog Number: 6501  
*Norbert Perrimon (Medical School) 1679
*Genetics 322. Vertebrate Pattern Formation  
Catalog Number: 0436  
Clifford J. Tabin (Medical School) 2430

*Genetics 323. Molecular Biology of V(D)J Recombination  
Catalog Number: 6950  
Marjorie A. Oettinger (Medical School) 3172

*Genetics 325. Human Genetics, Genomics and Complex Traits  
Catalog Number: 8275  
Joel N. Hirschhorn (Medical School) 4321

*Genetics 326. Human Molecular and Cancer Genetics  
Catalog Number: 2900  
David J. Kwiatkowski (Medical School) 3770

*Genetics 327. Systems Biology of Mammalian Cell Fate Decisions  
Catalog Number: 69285  
Suzanne Gaudet (Medical School) 6183

*Genetics 328. Lymphocyte Differentiation, Recombination, DNA Repair, Cancer  
Catalog Number: 2702  
Frederick W. Alt (Medical School) 3146

*Genetics 329. Genetic Analysis of Synaptic Transmission  
Catalog Number: 9734  
Joshua M. Kaplan (Medical School) 3522

*Genetics 330. Critical Thinking and Research Proposal Writing  
Catalog Number: 0210  
Enrollment: Limited to 20.  
Monica P. Colaiacovo (Medical School) 4949  
and members of the Department  
Half course (spring term). Hours to be arranged.  
A small group tutorial systematically guiding students in the writing of original, hypothesis-driven research proposals from initial topic selection through completion of a final draft.  
Note: Open to all BBS students; others need permission of the instructor. Not repeatable for credit.  
Prerequisite: Core course in genetics, cell biology, molecular biology, or biochemistry.

*Genetics 331. Developmental Oncobiology and Cancer Stem Cells  
Catalog Number: 17763  
Zhe Li (Medical School)

*Genetics 332. Combining genetic and biochemical approaches to elucidate mechanisms underlying cancer  
Catalog Number: 2975  
Karen M. Cichowski (Medical School) 3932
*Genetics 333. Computational biology of transcriptional and epigenetic regulation - (New Course)
Catalog Number: 96777
Xiaole Shirley Liu (Public Health) 4911

*Genetics 334. Genomics and the Genetics of Human Disease
Catalog Number: 5144
Raju Kucherlapati (Medical School) 4324

*Genetics 335. Genetics, epigenetics, gene regulation, evolution, disease
Catalog Number: 4982
Chao-Ting Wu (Medical School) 3535

*Genetics 336. Developmental Biology of Hematopoiesis
Catalog Number: 7165
Leonard I. Zon (Medical School) 1137

*Genetics 337. Human Molecular Genetics
Catalog Number: 7194
Stuart H. Orkin (Medical School) 7402

*Genetics 341. Development and Homeostasis of the Skeleton
Catalog Number: 8874
Matthew L. Warman (Medical School) 5875

*Genetics 342. Genetic Analysis of Zebrafish Kidney Organogenesis
Catalog Number: 4498
Iain A. Drummond (Medical School) 5350

*Genetics 344. Computational Genomics
Catalog Number: 2125
Peter J. Park (Medical School) 5917

*Genetics 347 (formerly *Pathology 381). Ras signaling and colon cancer
Catalog Number: 72917
Kevin M. Haigis (Medical School) 5913

*Genetics 349. Studying Human Diseases Through Structural Genomic Variation
Catalog Number: 36727
Charles Lee (Medical School) 6725

*Genetics 350. Genetic Regulation of Organogenesis and Organ Regeneration
Catalog Number: 4974
Richard L. Maas (Medical School) 3703
*Genetics 352. Cardiovascular Development and Disease, Muscle Biology
Catalog Number: 58035
Da-Zhi Wang (Medical School) 3228

*Genetics 353. Genetics of Human Disease
Catalog Number: 6608
Susan A. Slaugenhaupt (Medical School) 5483

*Genetics 354. Integrative genomics of cancer and autism
Catalog Number: 53387
Isaac S. Kohane (Medical School) 4531

*Genetics 355. Molecular Genetics of Human Neuromuscular Diseases
Catalog Number: 9253
Alan H. Beggs (Medical School) 1422

*Genetics 356 (formerly Pathology 312). Research in Molecular Cytogenetics
Catalog Number: 21395
Cynthia C. Morton (Medical School) 2194

*Genetics 357. Lung Stem Cell Biology and Cancer
Catalog Number: 9494
Carla Kim (Medical School) 5742

*Genetics 358. Developmental Neurobiology and Genetics
Catalog Number: 8297
Susan M. Dymecki (Medical School) 1736

*Genetics 359. Cancer and Development, Thrombopoiesis, Intestinal Development
Catalog Number: 9880
Ramesh Arjun Shivdasani (Medical School) 4538

*Genetics 360. Microtubule Associated RNAs During Mitosis
Catalog Number: 5677
Michael Demian Blower (Medical School) 5733

*Genetics 361. Mechanism of X-inactivation in Mammals
Catalog Number: 9152
Jeannie T. Lee (Medical School) 2129

*Genetics 362. Molecular Biology and Genetics of Cancer
Catalog Number: 9382
David Morse Livingston (Medical School) 4872
*Genetics 364. Development Application of Mammalian Vectors
Catalog Number: 7930
Richard C. Mulligan (Medical School) 2274

*Genetics 366. Molecular Genetic Approaches to Human Disease Mechanisms
Catalog Number: 8153
Marcy E. MacDonald (Medical School) 2635

*Genetics 368 (formerly Neurobiology 368). Molecular Genetics of Aging and Neurodegenerative Disorders
Catalog Number: 50867
Bruce Yankner (Medical School) 1557

*Genetics 369. Molecular Mechanisms of Plant Signal Transduction
Catalog Number: 3010
Jen Sheen (Medical School) 3892

*Genetics 370. Molecular Basis of Breast Cancer Initiation and Progression
Catalog Number: 4519
Kornelia Polyak (Medical School) 3898

*Genetics 371. Functional Genomics and Proteomics
Catalog Number: 2190
Marc Vidal (Medical School) 3914

*Genetics 372 (formerly Pathology 361). Molecular Mechanisms of Aging and Age Related Diseases
Catalog Number: 65974
David A. Sinclair (Medical School) 2610

*Genetics 373. Kidney Disease, Genetics, Cytoskeleton
Catalog Number: 3875
Martin R. Pollak (Medical School) 4329

*Genetics 374. Mechanisms underlying accurate meiotic chromosome segregation
Catalog Number: 4419
Monica P. Colaiacovo (Medical School) 4949

*Genetics 376. Cell Cycle Control and Genomic Integrity
Catalog Number: 3788
Stephen J. Elledge (Medical School) 4954

*Genetics 377. Molecular Genetics of Chromosome Organization and Gene Expression
Catalog Number: 0811
Mitzi I. Kuroda (Medical School) 4959
*Genetics 378 (formerly Pathology 330). Aging, Stress Defenses, and Developmental Gene Regulation in C. elegans  
Catalog Number: 14452  
*T. Keith Blackwell (Medical School) 1826

*Genetics 379. Applying Population Genetics to Find Disease Genes  
Catalog Number: 1677  
David E. Reich (Medical School) 4965

*Genetics 380. Molecular Approaches to Metabolism and Energy Balance  
Catalog Number: 4688  
Evan David Rosen (Medical School) 4966

*Genetics 382. Muscle Stem Cell Commitment and Differentiation  
Catalog Number: 2626  
Emanuela Gussoni (Medical School) 5155

*Genetics 385 (formerly Pathology 353). Cell Cycle Proteins in Development and Cancer  
Catalog Number: 81081  
Piotr Sicinski (Medical School) 2245

*Genetics 386. Models of Cardiac Development and Disease  
Catalog Number: 1127  
John David Mably (Medical School) 6160

*Genetics 387. Stem Cells and Developmental Biology  
Catalog Number: 4080  
Chad A. Cowan 6099

*Genetics 388. Genetics of Neuronal Morphogenesis and Connectivity in C. Elegans  
Catalog Number: 63445  
Maxwell G. Heiman (Medical School) 3225

*Genetics 389 (formerly Pathology 315). Epigenomics of Allele-Specific Expression  
Catalog Number: 29559  
Alexander Gimelbrant (Medical School) 6521

*Genetics 391. Human Genome Structural and Regulatory Variation  
Catalog Number: 51043  
Steven A. McCarroll (Medical School) 6557

*Genetics 392 (formerly *Pathology 318). Self-Renewal and Cancer  
Catalog Number: 10448  
David M. Langenau (Medical School) 6459
*Genetics 393. Genetic basis of skeletal development and evolution  
Catalog Number: 71384  
Matthew Harris (Medical School) 6954

*Genetics 394. How transcriptional networks rewire neuronal circuits  
Catalog Number: 42703  
Jesse M. Gray (Medical School) 3469

*Genetics 395. Global studies of transcription elongation  
Catalog Number: 72253  
Lee Stirling Churchman (Medical School) 3222

*Genetics 396 (formerly Pathology 369). Molecular recognition and protein engineering  
Catalog Number: 46863  
J. Keith Joung (Medical School) 5149

*Genetics 397. Immunogenomics  
Catalog Number: 95934  
Soumya Raychaudhuri (Medical School) 2624

*Genetics 398. Epigenetic regulation in stem cell/development & disease - (New Course)  
Catalog Number: 48404  
Yi Zhang (Medical School) 7196

*Genetics 399. Population genomics of human transcriptional variation - (New Course)  
Catalog Number: 98121  
Barbara Elaine Stranger (Medical School) 7197

Quarter Courses for Graduate Students Only

*Genetics 300qc. Advanced Topics in Genetics  
Catalog Number: 84294  
David Lopes Cardozo (Medical School) 5995  
A series of reading and discussion seminars, each running for a half term (7 weeks).  
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Genetics 302qc. Teaching 101: Bringing Effective Teaching Practices to your Classroom  
Catalog Number: 91159 Enrollment: Limited to 15.  
Fred Winston (Medical School) 7877  
Quarter course (spring term). TBA.  
Survey basics of effective teaching practices, focusing on practical application and real-life examples. Topics include effective lecturing techniques, using goals and learning styles to inform lesson planning and design, assessing student understanding, and facilitating discussions.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Genetics 303qc. Understanding Common Complex Human Traits and Disease through Genome-Wide Association Studies]  
Catalog Number: 99274 Enrollment: Limited to 10.  
Daniel Ian Chasman (Medical School)  
Quarter course (fall term). Tu., Th., 2:30–4.  
Introduction to the genetic basis of common human complex traits and disease as explored by genome-wide association studies in populations. Focus on concepts, techniques, and translational implications as illustrated by the recent literature.  
Note: Expected to be given in 2013–14. Given in alternate years. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Genetics 304qc. A Short Course on Inheritance and Weird Stuff - (New Course)  
Catalog Number: 75405  
Chao-Ting Wu (Medical School)  
Quarter course (spring term). Th., 10–1.  
Focus on patterns of inheritance, including those that were once considered extraordinary but are now recognized as paradigms spanning fungi to humans. Expectations: questions, ideas, conversation during class. No tests, problem sets, or papers.  
Note: This course is a short version of Genetics 219 and so is not recommended for students who have taken Genetics 219. Genetics 219 may be moved from the fall to the spring in future years and will likely be limited to first-year students. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.  
Prerequisite: Primarily for first-year graduate students, but is open to medical students and advanced undergraduates. A basic understanding of genetics recommended.

*Genetics 390qc (formerly *Genetics 390). Advanced Experimental Methods: Experimental Approaches in Genetic Analysis  
Catalog Number: 8039 Enrollment: Limited to 8.  
Fred Winston (Medical School) 7877 and members of the Department  
Quarter course (spring term). M. through F., 8:30–4.  
A survey of major themes in genetics combined with exposure to various experimental techniques, technologies, and model systems. Combines lectures and hands-on laboratory activities emphasizing experimental methods, hypothesis generation and testing, and data analysis.  
Note: Limited to 8 students. Priority will be given to first year graduate students. Students must first contact the faculty for enrollment approval prior to registration for the course. Meeting Dates/Times: Approximately 8:30 am-4:00 pm each day for 10 days in January.  
Prerequisite: Students must also enroll in, or have taken, Genetics 201.

*Human Biology and Translational Medicine
Human Biology and Translational Medicine (HBTM) focuses on providing rigorous multidisciplinary training in the fundamental mechanisms and essential methodologies of human biology and disease-oriented research, and in the translation of these discoveries into advances in the diagnosis, prevention, and treatment of human disease.

**Primarily for Graduates**

**HBTM 200. Principles and Practice of Human Pathology**
Catalog Number: 10575 Enrollment: Enrollment may be limited
Constance L. Cepko (Medical School)
Half course (spring term). Tu., Th., 9–11 lab will be either Tuesday or Thursday, TBD, 11-1.
Overview of human pathology, emphasis on mechanisms of disease and modern diagnostic technologies. Integrated lectures, abs, and student-driven term project leading to formal presentation on a medical, socioeconomic, or technological issue in human pathology.
*Note:* Jointly offered with HMS as HT035.0

**Graduate Courses of Reading and Research**

*HBTM 304. Resolution of Lung Inflammation and Injury*
Catalog Number: 1421
Bruce D. Levy (Medical School) 5922

*HBTM 305. Endothelial Cell, Nitric Oxide, Proteomic Redox Regulation*
Catalog Number: 9077
Joseph Loscalzo (Medical School) 5923

*HBTM 307. Mechanisms of heart growth, regeneration, and failure*
Catalog Number: 1294
Anthony Rosenzweig (Medical School) 5925

*HBTM 314. Skin Immunology T Cell Trafficking Lymphoma*
Catalog Number: 2368
Thomas Seth Kupper (Medical School) 5960

*HBTM 315. Hypothalamic Gene Function and Regulation*
Catalog Number: 1577
Joseph A. Majzoub (Medical School) 1875

*HBTM 317. Adhesion, Integrins, Hematopoiesis, Kidney Genetics*
Catalog Number: 5746
M. Amin Arnaout (Medical School) 1822

*HBTM 320. Endothelial Progenitors in Health Disease*
Catalog Number: 8324
Joyce E. Bischoff (Medical School) 1448
*HBTM 322. Cardiac Repair and Regeneration  
Catalog Number: 4398  
Ronglih Liao (Medical School) 6169

*HBTM 323. Cardiovascular Biology in Human and Zebrafish  
Catalog Number: 5160  
Calum Archibald MacRae (Medical School) 6170

*HBTM 324. Principles/Practices of Developing Human Antibody Therapies  
Catalog Number: 3910  
Wayne A. Marasco (Medical School) 6171

*HBTM 325. Genetics of Blood Development  
Catalog Number: 7279  
Barry Htin Paw (Medical School) 6172

*HBTM 326. Human Genetics of Neuroinflammatory and Neurodegenerative Disorders  
Catalog Number: 1515  
Philip Lawrence De Jager (Medical School) 6233

*HBTM 327. Translational Research on Kinase Inhibitors  
Catalog Number: 0138  
Pasi Antero Janne (Medical School) 6234

*HBTM 328. Single-molecule biology and visualization of cellular dynamics  
Catalog Number: 8917  
Ofer Levy (Medical School) 6236

*HBTM 330. Developmental Biology/Genetics (Congenital Anomalies, Cancer)  
Catalog Number: 8982  
Patricia K. Donahoe (Medical School) 3252

*HBTM 331. Tumor Microenvironment, Angiogenesis and Metastasis: from Bench-to-Bedside-to-Biomarkers  
Catalog Number: 8347  
Rakesh K. Jain (Medical School) 2079

*HBTM 340. (LHB). Disease-Centered Tutorial Clinics  
Catalog Number: 8640 Enrollment: Limited to LHB students only.  
Jordan A. Kreidberg (Medical School) 2080  
Half course (spring term).

*HBTM 341. Gene Regulation of Metabolism in Cardiovascular Health and Disease  
Catalog Number: 99499  
Zoltan Pierre Arany (Medical School) 6409
*HBTM 342. Research in Hematology and Oncology  
Catalog Number: 47977  
* Benjamin L. Ebert (Medical School) 6410

*HBTM 343. Complex Trait Genetics of Blood Pressure and QT Interval Variation  
Catalog Number: 63084  
* Christopher Holmes Newton-Cheh (Medical School) 6270

*HBTM 344. Biology of Hematopoietic Stem Cells  
Catalog Number: 11562  
* David Allen Williams (Medical School) 6460

*HBTM 345. Tuberous Sclerosis and LAM: Pathogenic Mechanisms  
Catalog Number: 91208  
* Elizabeth Petri Henske (Medical School) 6579

*HBTM 346. Bioimaging and Optical Spectroscopy: Detection of Early Disease with Light  
Catalog Number: 79138  
* Lev T. Perelman (Medical School) 6601

*HBTM 347. Effects of Diabetes, Exercise, and Skeletal Muscle Metabolism  
Catalog Number: 73142  
* Laurie Joy Goodyear (Medical School) 3231

*HBTM 348. Molecular Pathogenesis of the Metabolic Syndrome  
Catalog Number: 44412  
* Sudha Biddinger (Medical School) 2628

*HBTM 349. Network Medicine in Vascular Disease - (New Course)  
Catalog Number: 14556  
* Stephen Y. Chan (Medical School) 7011

*HBTM 350. Molecular basis of hematologic and solid cancers - (New Course)  
Catalog Number: 61555  
* Roberto Chiarle (Medical School) 7016

*HBTM 351. Biology and Immunotherapy of Chronic Lymphocytic Leukemia - (New Course)  
Catalog Number: 49316  
* Catherine Ju-Ying Wu (Medical School) 7060

*HBTM 352 (Formerly Pathology 310). Regulation of Vascular Development and Pathology - (New Course)  
Catalog Number: 28771  
* Patricia A. D’Amore (Medical School) 1168
*HBTM 353 (formerly Pathology 313). Mechanobiology and Developmental Control - (New Course)
Catalog Number: 82486
Donald E. Ingber 2832

*HBTM 354 (formerly Pathology 317). Epithelial:stromal Interactions in the Formation and Progression of Carcinomas - (New Course)
Catalog Number: 64171
Antoine Karnoub (Medical School) 6458

*HBTM 355 (formerly Pathology 377). Epigenetic Mechanisms in Mammalian Development - (New Course)
Catalog Number: 42288
Bradley E. Bernstein (Medical School) 5669

*HBTM 356 (formerly Pathology 327). Genetic Models of Leukemogenesis - (New Course)
Catalog Number: 86835
A. Thomas Look (Medical School) 3771

*HBTM 357 (formerly Pathology 329). Tissue-selective lymphocyte homing and diversity - (New Course)
Catalog Number: 96737
James J. Campbell (Medical School) 4438

*HBTM 358 (formerly Pathology 332). Control of Cell Proliferation by RB/E2F - (New Course)
Catalog Number: 33855
Nicholas J. Dyson (Medical School) 1829

*HBTM 359 (formerly Pathology 333). Genetics of Neurodegenerative Disease - (New Course)
Catalog Number: 99808
Mel B. Feany (Medical School) 4439

*HBTM 360 (formerly Pathology 334). Characterization of Molecular Targets of Cancer Therapy - (New Course)
Catalog Number: 25971
Daniel A. Haber (Medical School) 1832

*HBTM 361 (formerly Pathology 335). Molecular Approaches to Cell Immortalization and Transformation - (New Course)
Catalog Number: 39571
William C. Hahn (Medical School) 4317
*HBTM 362 (formerly Pathology 350). Topics in Vascular Biology - (New Course)
Catalog Number: 14796
*HBTM 363 (formerly Pathology 352). Recombination Functions of the BRCA Genes - (New Course)
Catalog Number: 22147
*HBTM 364 (formerly Pathology 359). Signal Transduction Pathways Involved in Cellular Proliferation and Apoptosis - (New Course)
Catalog Number: 14536
*HBTM 365 (formerly Pathology 360). Biology and Genetics of Human Cancers - (New Course)
Catalog Number: 37417
*HBTM 366 (formerly Pathology 364). Molecular Genetics of Erythroid Iron Metabolism - (New Course)
Catalog Number: 22101
*HBTM 367 (formerly Pathology 365). Control of Endothelial Cell Fate and Vascular Development by Fluid Mechanical Forces - (New Course)
Catalog Number: 57098
*HBTM 369 (formerly Pathology 372). DNA Damage Responses and Genomic Stability - (New Course)
Catalog Number: 54705
*HBTM 370 (formerly Pathology 373). Integration of Metabolism and Stress Pathways - (New Course)
Catalog Number: 39025
*HBTM 371 (formerly Pathology 374). Cell signaling in innate immunity - (New Course)
Catalog Number: 27824
*HBTM 372 (formerly Pathology 378). Epigenetic Regulation in Development and Disease - (New Course)
Catalog Number: 55243
Laurie Jackson-Grusby (Medical School) 5671

*HBTM 373 (formerly Pathology 382). Mechanisms of Acute and Chronic Allograft Rejection - *(New Course)*
Catalog Number: 27268
Richard N. Mitchell (Medical School) 5916

*HBTM 374 (formerly Pathology 383). Cell Cycle, Ubiquitination and Protein Degradation, Cancer Research - *(New Course)*
Catalog Number: 62612
Wenyi Wei (Medical School) 5918

*HBTM 375 (formerly Pathology 384). The Molecular Genetics of Human Cancer - *(New Course)*
Catalog Number: 50657
Pier Paolo Pandolfi (Medical School) 6177

*HBTM 376 (formerly Pathology 386). Hematopoietic stem cell biology and aging - *(New Course)*
Catalog Number: 28486
Derrick J. Rossi 6330

*HBTM 377 (formerly Pathology 388). Impact of Epigenetics On Cellular Homeostasis - *(New Course)*
Catalog Number: 30031
Johnathan Whetstine (Medical School) 6244

**Quarter Courses for Graduate Students Only**

*HBTM 300qc. Advanced Topics in Human Biology and Translational Medicine*
Catalog Number: 32772
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks).
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*HBTM 301qc. Case Studies in Human Biology and Translational Medicine*
Catalog Number: 95905 Enrollment: Will be limited.
Caren Grossbard Solomon (Medical School) 6960 and Mary Elizabeth Hamel (Medical School) Quarter course (spring term). M. through F., 9–11.
Two-week course that is required of and restricted to first-year LHB students. Each week of the course focuses on a different "case study" in translational medicine.
Note: January term course. Restricted to Leder students only.
**HBTM 302qc. Imaging and Microscopy Methods in Biology and Medicine**  
Catalog Number: 13534 Enrollment: Limited to 12.  
Lev T. Perelman (Medical School)  
Quarter course (fall term). Th., 3–5.  
Introduce modern imaging modalities with emphasis on modalities frequently employed in cellular, molecular biology and medicine. Overview of noninvasive medical imaging techniques frequently used in scientific research: X-ray CT, MRI, ultrasound, PET/SPECT and optical imaging.  
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

**HBTM 303qc. Introduction to the Visual System - (New Course)**  
Catalog Number: 65449  
Patricia A. D’Amore (Medical School) and other faculty  
Quarter course (fall term). W., 3–5.  
Provides an introduction to the visual system and its assessment. Each two-hour session consists of two lectures provided by faculty with expertise in that area. Topics will include basic science and clinical topics, normal vision and abnormal vision, methods of assessment of animals and humans, clinical and laboratory measures.

**HBTM 304qc. Drug Development: From Concept to Commercialization - (New Course)**  
Catalog Number: 83871  
Michael Goldberg (Medical School)  
Quarter course (spring term). Hours to be arranged.  
This course is intended to provide graduate students with exposure to the diverse aspects of the drug development process. The proteasomal inhibitor Velcade will be used as an exemplar, though the themes of discovery, development, manufacturing, business development, commercialization, and growth are relevant across most therapeutics. Each class will include a lecture by a person involved in that particular aspect of Velcade development followed by a group discussion of the associated case study.

**Immunology**

All courses in Immunology are subject to limitation in enrollment and will not be offered unless there is sufficient demand.

**Primarily for Graduates**

**Immunology 201. Principles of Immunology**  
Catalog Number: 8337 Enrollment: Limited to 50.  
Shannon Turley (Medical School), Ulrich H. Von Andrian-Werburg (Medical School) and members of the Program in Immunology  
Half course (fall term). Tu., Th., 1:30-3, with section Tu., Th., 3-4. EXAM GROUP: 15, 16  
Comprehensive core course in immunology. Topics include a broad but intensive examination of the cells and molecules of the immune system. Special attention given to the experimental approaches that led to general principles of immunology.
Note: Intended for students who have had prior exposure to immunology on the undergraduate level. In the absence of such exposure, students must obtain the permission of the Course Director. Offered jointly with the Medical School as IM 702.0.
Prerequisite: A background in genetics and biochemistry strongly recommended.

**Immunology 202. Advanced Principles of Immunology**
Catalog Number: 5674
D. Branch Moody (Medical School) and Martin E. Hemler (Medical School)
Continuation of Immunology 201 as an intensive core course in fundamentals of immune system, emphasis of physiological roles of immune cells in vivo. Classes taught by experts in their fields; involve critical reading of primary literature.
Note: Offered jointly with the Medical School as IM 712.0.
Prerequisite: Immunology 201 or its equivalent.

**Immunology 204. Critical Readings for Immunology**
Catalog Number: 9563
Florian Winau (Medical School)
Half course (spring term). Th., 10-1.
Original research articles from fields including immunology, biochemistry, genetics, and cell and developmental biology will be critically analyzed in an intensive small group format. Grading will be based on class participation and oral presentations.
Note: Required for first-year immunology students, open to second-year immunology students.
No auditors. Offered jointly with the Medical School as IM 703.0.

**Graduate Courses in Reading and Research**

Primarily designed for work on a dissertation problem, carried out under the supervision of the following faculty members whose special research interests are listed.

**Immunology 300. Advanced Topics in Immunology**
Catalog Number: 4739
David Lopes Cardozo (Medical School) 5995
Reading and discussion seminars each running for a half term (7 weeks). Two seminars, which can be taken in different terms, are required for credit. Topics include the role of intracellular and transmembrane protein phosphates in signal transduction.
Note: Intended for first- and second-year Immunology graduate students. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Call 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

**Immunology 301. Immunology Seminar**
Catalog Number: 4971 Enrollment: Limited to 20.
Michael C. Carroll (Medical School) and William Nicholas Haining (Medical School)
Half course (fall term; repeated spring term). W., at 12:15, W., 3:30–5.
Gives students exposure to research topics in Immunology. Students prepare for the weekly seminar through readings, discussions, and preparing brief write-ups. These discussions are
facilitated by members of the Committee on Immunology.

*Note: Required for first-year Immunology graduate students.*

**Immunology 302. Innate and adaptive immune inflammation in allergic and asthmatic models**  
Catalog Number: 1355  
K. Frank Austen (Medical School) 6887

**Immunology 303. Immunity to Tuberculosis**  
Catalog Number: 9490  
Samuel M. Behar (Medical School) 4570

**Immunology 304. Innate immunity and host-pathogen interactions - (New Course)**  
Catalog Number: 62634  
Lynda Stuart (Medical School) 6466

**Immunology 305. T Cell Immunology - tolerance, transplantation, autoimmunity**  
Catalog Number: 74626  
Laurence A. Turka (Medical School) 2633

**Immunology 309. Molecular Aspects of Lymphocyte Interactions**  
Catalog Number: 3778  
Cox Terhorst (Medical School) 6280

**Immunology 310. Responses mediated by innate and adaptive immune cells in cancer and other inflammatory disorders**  
Catalog Number: 53318  
Mikael J. Pittet (Medical School) 2641

**Immunology 312. Interplay Between the Innate Immune System and Gut Microbial Communities**  
Catalog Number: 11923  
Wendy S. Garrett (Public Health) 6613

**Immunology 313. Human genetics to understand immune dysregulation**  
Catalog Number: 75437  
Robert M. Plenge (Medical School) 6582

**Immunology 314. Rheumatic Diseases**  
Catalog Number: 8065  
Peter H. Schur (Medical School) 4551

**Immunology 315. Immunoregulation**  
Catalog Number: 5540  
Martin E. Dorf (Medical School) 4541
*Immunology 316. Development and Function of T Cells, Their Subsets and Distinctive Markers
Catalog Number: 3192
Harvey Cantor (Medical School) 4460

*Immunology 317. Molecular Biology of Receptor Transduction in the Immune System
Catalog Number: 0518
Brian Seed (Medical School) 7619

*Immunology 318. Mechanisms of Antigen Presentation and Cellular Immunology
Catalog Number: 23104
Florian Winau (Medical School) 2639

*Immunology 319. Molecular Basis of Cell Adhesion and Migration
Catalog Number: 0293
Timothy A. Springer (Medical School) 6145

*Immunology 320. Cell Adhesion in Vascular Biology and Innate Immunity
Catalog Number: 85446
Denisa D. Wagner (Medical School) 2092

*Immunology 320L. The study of human tissue resident T cells - (New Course)
Catalog Number: 86176
Rachael Ann Clark (Medical School) 3429

*Immunology 321. Why functional memory T cells are formed, and why protective T cell immunity fails to develop against chronic viral infection and cancer
Catalog Number: 15497
William Nicholas Haining (Medical School) 6946

*Immunology 321L. The molecular mechanism of immunity to fungal pathogens. - (New Course)
Catalog Number: 46538
Jatin Mahesh Vyas (Medical School) 7055

*Immunology 322. Systems Approaches to Innate and Adaptive Immunity; Functional Genomics of Complex Disease Genetics
Catalog Number: 12714
Ramnik Xavier (Medical School) 6878

*Immunology 322L. Molecular and cellular analysis of primary immunodeficiencies - (New Course)
Catalog Number: 79856
Luigi D. Notarangelo (Medical School) 6666
*Immunology 323L. Immunity to bacterial enteropathogens: modulation by host and microbial factors - (New Course)
Catalog Number: 47426
Bobby J. Cherayil (Medical School) 7014

*Immunology 324. T-cell Development in Animal Models of Autoimmunity Disease
Catalog Number: 1905
Christophe O. Benoist (Medical School) 3928

*Immunology 324L. T cell sensitization and immunoregulation in ocular allo- and autoimmunity - (New Course)
Catalog Number: 38401
Reza Dana (Medical School) 7164

*Immunology 325. Immune Cell Interactions Controlling T Cell Effector Function
Catalog Number: 1078
Thorsten Roman Mempel (Medical School) 6173

*Immunology 325L. Mechanisms of Peripheral Tolerance and Their Breakdown in Allergic and Autoimmune Diseases - (New Course)
Catalog Number: 46639
Talal Amine Chatila (Medical School) 7126

*Immunology 326. Human T-cell Antigen Receptor; Human Lymphocyte Differentiation Antigens; TCR; Thymic Development; Protective Immunity; HIV-I; T-cell Vaccines
Catalog Number: 6719
Ellis L. Reinherz (Medical School) 1408

*Immunology 326L. Mechanistic elucidation of immune signaling - (New Course)
Catalog Number: 86626
Hao Wu (Medical School)

*Immunology 327. Chemical Cell Biology
Catalog Number: 0824
Stuart L. Schreiber 2166

*Immunology 327L (formerly *HBTM 368). Phagocyte-endothelial Cell Responses in Inflammation - (New Course)
Catalog Number: 28559
Tanya Mayadas (Medical School) 4963

*Immunology 328r. Introduction to Research
Catalog Number: 5531
Michael C. Carroll (Medical School) 2050
*Immunology 329. Basic and Clinical Mechanisms of Autoimmunity
Catalog Number: 0354
Howard L. Weiner (Medical School) 1335

*Immunology 329L. Examining the interplay of inflammation and glycosylation - (New Course)
Catalog Number: 20965
Robert Anthony

*Immunology 330. Molecular Aspects of Mast Cells—Mediated Immune Responses
Catalog Number: 7296
Richard L. Stevens (Medical School) 2892

*Immunology 330L. CD4+ T Cell Tolerance - (New Course)
Catalog Number: 55675
James J. Moon (Medical School) 7251

*Immunology 331. Lymphoid Organs
Catalog Number: 5725
Joan E. Stein-Streilein (Medical School) 4769

*Immunology 332. The Role of Cysteinyl Leukotrienes and their Receptors in Pulmonary Inflammation and Fibrosis
Catalog Number: 9530
Yoshihide Kanaoka (Medical School) 5401

*Immunology 334. Understanding the Mechanisms of Pathogen-sensing by the Innate Immune System
Catalog Number: 11337
Terry K. Means (Medical School) 6898

*Immunology 336. T-Lymphocyte Recognition
Catalog Number: 7292
Michael B. Brenner (Medical School) 2864

*Immunology 337. Development of Mucosal Immunologic Functions
Catalog Number: 1320
W. Allan Walker (Medical School, Public Health) 1175

*Immunology 339. Function and Regulation of Cellular Adhesion Mechanisms
Catalog Number: 7841
Martin E. Hemler (Medical School) 2868

*Immunology 340. The Human Major Histocompatibility Complex, Immune Function, and Disease
*Immunology 341. Gene Regulation in Normal and Leukemic Stem Cells  
Catalog Number: 9403  
Daniel G. Tenen (Medical School) 1172

*Immunology 342. Immune Cell Signaling, Gene Transcription and Tissue Injury in Lupus.  
Catalog Number: 7829  
George C. Tsokos (Medical School) 5911

*Immunology 343. The Regulation of Eicosanoid Generation  
Catalog Number: 8593  
Jonathan P. Arm (Medical School) 4946

*Immunology 344. Genetic Analysis of Lymphocyte Development and Nuclear Oncogene Function  
Catalog Number: 6438  
Frederick W. Alt (Medical School) 3146

*Immunology 345. Assembly and Function of pre-B Cell-fate and B Lymphocyte Antigen Receptors  
Catalog Number: 0866  
Shiv S. Pillai (Medical School) 3393

*Immunology 346. The Role of Complement in the Immune Response  
Catalog Number: 1755  
Michael C. Carroll (Medical School) 2050

*Immunology 348. Cell Biology, Biochemistry, and Immunology of Leukocyte-endothelial Adhesion  
Catalog Number: 0901  
Francis W. Luscinskas (Medical School) 3772

*Immunology 350. Regulation of Autoimmune T Cell Responses  
Catalog Number: 1916  
Vijay K. Kuchroo (Medical School) 2041

*Immunology 351. Investigating the Role of Lectin - Carbohydrate Interactions in T Cell Trafficking and Differentiation and in Tumor Immune Evasion  
Catalog Number: 1875  
Charles J. Dimitroff (Medical School) 5521
*Immunology 353. Innate and Adaptive Immune Responses in HIV-1 Infection
Catalog Number: 6000
Marcus Altfeld (Medical School) 5689

*Immunology 354. Topics in Transplantation Biology
Catalog Number: 1459
David H. Sachs (Medical School) 1075

*Immunology 355. Molecular mechanisms of antigen presentation
Catalog Number: 59519
Edda Fiebiger (Medical School) 2631

*Immunology 356. Cytotoxic T Lymphocytes
Catalog Number: 8232
Judy Lieberman (Medical School) 1542

*Immunology 357. Microbial-epithelial-immune Cell Interactions in Mucosal Tissues
Catalog Number: 2111
Richard S. Blumberg (Medical School) 2351

*Immunology 359. Immunoregulatory Mechanisms at Mucosal Surfaces, Including the Lung and Gut, Affecting the Development of Inflammation, Allergy, Asthma or Peripheral Tolerance in Mice and Humans.
Catalog Number: 3037
Dale T. Umetsu (Medical School) 5289

*Immunology 360. Hematopoietic Stem Cells and their Niche
Catalog Number: 8952
David T. Scadden 2649

*Immunology 361. Induction and Regulation of Antigen-specific T Cell Responses
Catalog Number: 7578
Gilles A. Benichou (Medical School) 2652

*Immunology 362. Chemokine and Lipid Chemoattractants in Immune Cell Trafficking in Normal Physiology and Disease
Catalog Number: 3817
Andrew D. Luster (Medical School) 2654

*Immunology 363. Regulation of Immune and Inflammatory Responses by the Leukocyte Immunoglobulin-like Receptor Family
Catalog Number: 6813
Howard R. Katz (Medical School) 2837
*Immunology 364. T-cell Differentiation, Tolerance and Autoimmunity  
Catalog Number: 0972  
*Diane J. Mathis (Medical School) 3063*

*Immunology 366. Molecular Regulation of T Cell Cytokine Production and T Cell Interactions with the Blood Vessel Wall  
Catalog Number: 6676  
*Andrew H. Lichtman (Medical School) 3523*

*Immunology 367. Biology and Chemistry of Complement Problems  
Catalog Number: 8080  
*Anne Nicholson-Weller (Medical School) 1063*

*Immunology 368. RNA Granules  
Catalog Number: 8986  
*Paul J. Anderson (Medical School) 1947*

*Immunology 369. Mechanisms of Autoimmune Disease  
Catalog Number: 6787  
*Vicki R. Kelley (Medical School) 2656*

*Immunology 371. Cellular and Molecular Mechanisms of Eosinophil and Other Leukocyte Involvement in Allergic Flammation  
Catalog Number: 3716  
*Peter F. Weller (Medical School) 2657*

*Immunology 372. Immunopathogenesis & regulation of immune response in EAE  
Catalog Number: 34969  
*Samia Joseph Khoury (Medical School) 6948*

*Immunology 373. Biology of Histocompatibility Systems in Man and Experimental Animals; Immunology of Aging  
Catalog Number: 6317  
*Edmond J. Yunis (Medical School) 6036*

*Immunology 374. Tumor Necrosis Factor-Alpha Gene Regulation in the Immunopathogenesis of AIDS and TB  
Catalog Number: 4558  
*Anne E. Goldfeld (Medical School) 1008*

*Immunology 375. Biology and Function of Immunoreceptors  
Catalog Number: 0510  
*Jean-Pierre Kinet (Medical School) 2663*

*Immunology 376. Molecular Basis of Immunodeficiencies; Immunological and Molecular Basis of Atopic Dermatitis*
2012-2013 Previous Courses of Instruction

Catalog Number: 3618
Raif S. Geha (Medical School) 1795

*Immunology 378. Molecular mechanisms of T cell activation
Catalog Number: 2916
Kai Wucherpfennig (Medical School) 2481

*Immunology 380. Control of Leukocyte Trafficking and the Immune Response By Chemokines and Other Cytokines
Catalog Number: 4872
Barrett J. Rollins (Medical School) 3775

*Immunology 382. AIDS Immunopathogenesis and Immune Reconstitution
Catalog Number: 0468
Robert P. Johnson (Medical School) 6125

*Immunology 384. The Role of Cysteiny1 Leukotrienes and Nucleotid e Receptors in Control of Pulmonary Allergic Immunity
Catalog Number: 1056
Joshua A. Boyce (Medical School) 6230

*Immunology 385. Regulation of T Lymphocyte Activation and Differentiation
Catalog Number: 1243
I-Cheng Ho (Medical School) 2764

*Immunology 386. Molecular and Signaling Pathways Regulating Productive T-cell Responses and T-cell Energy/ Tolerance
Catalog Number: 35936
Vassiliki A. Boussiotis (Medical School) 6879

*Immunology 389. Development of Cancer Vaccines
Catalog Number: 4106
Glenn Dranoff (Medical School) 1821

*Immunology 390. The Role of NK Cells in Tissues
Catalog Number: 87458
Galit Alter (Medical School) 6760

*Immunology 391. Transcription Factors in Lymphocyte Commitment and Differentiation
Catalog Number: 5285
Katia Georgopoulos (Medical School) 2070

*Immunology 392. Dendritic Cells and the Initiation of Immune Responses; Genetic Analysis using Genome-Wide Mammalian RNAi Libraries
Catalog Number: 0298
Nir Hacohen (Medical School) 5157
*Immunology 393. The Role of the Transcription Factor NF-kB in Regulating Innate Inflammatory Responses  
Catalog Number: 3287  
Bruce H. Horwitz (Medical School) 5158

*Immunology 394. Cytotoxic Lymphocytes  
Catalog Number: 0938  
D. Branch Moody (Medical School) 5159

*Immunology 395. NKT and Other Immune Cell Subsets in Anti-Tumor & Anti-Viral Immunity  
Catalog Number: 2491  
Mark Adrian Exley (Medical School) 5749

*Immunology 396. Interested in Immune Tolerance, Particularly in Settings of Autoimmunity and Transplantation.  
Catalog Number: 1812  
Terry B. Strom (Medical School) 5160

*Immunology 397. Antigen Processing and Presentation by Dendritic Cells in Autoimmunity and Cancer  
Catalog Number: 3393  
Shannon Turley (Medical School) 5255

*Immunology 398. The Role of Notch Signaling in Lymphoid Neoplasia  
Catalog Number: 9151  
Jon Christopher Aster (Medical School) 5750

Quarter Courses for Graduate Students Only

*Immunology 300qc. Advanced Topics in Immunology  
Catalog Number: 99401  
David Lopes Cardozo (Medical School) 5995  
A series of reading and discussion seminars, each running for a half term (7 weeks).  
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Immunology 301qc. Autoimmunity  
Catalog Number: 69978  
Kai Wucherpfennig (Medical School) 2481, Vijay K. Kuchroo (Medical School)  
Quarter course (fall term). M., 4–6.  
This course will focus on basic immunological mechanisms of autoimmune diseases, with an emphasis on recent advances in the field. At each session, we will focus on a particular topic and discuss three important publications.
*Immunology 302qc. Clinical Sessions
Catalog Number: 40428
*Rachael Ann Clark (Medical School) 3429
Quarter course (spring term). Hours to be arranged.
Lectures by physician scientists and clinical exposure to patients with immunologically mediated diseases. The goal is to foster translational research into human immunologic disease.
*Note: Limited to Immunology students. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Immunology 303qc. The Warring Genomes: Innate Immunity and Host Defense
Catalog Number: 55555
*Jonathan C. Kagan (Medical School) 6235
Quarter course (spring term). M., 4–6.
Focus on basic cellular and molecular aspects of innate immunity, with an emphasis on recent advances in the field. Each class will cover a specific topic, and supporting literature will be provided by the instructor.
*Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.
*Prerequisite: Students are expected to have already taken IMM201.

[*Immunology 304qc. Current Concepts in Mucosal Immunology]*
Catalog Number: 25936
*J. Rodrigo Mora (Medical School) and Scott Snapper (Medical School)*
Quarter course (spring term). Hours to be arranged.
Innate and adaptive immune mechanisms operating at mucosal surfaces and their interplay under normal and pathological conditions.
*Note: Expected to be given in 2013–14. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Immunology 305qc. Neuro-immunology in Development, Regeneration and Disease - (New Course)*
Catalog Number: 98545
*Beth Stevens (Medical School) and Clifford Woolf (Medical School)*
Quarter course (spring term). (Th.), 5–7 p.m.
It is increasingly clear that the nervous system and immune system share parallel molecular pathways, and communication between neurons and immune cells play significant roles in homeostasis and disease. This course will investigate current topics in neuro-immunology: CNS development, chronic pain, neuro-degeneration, aging, axon regeneration, auto-immunity and infection. We will focus our discussions on molecular mechanisms shared by the immune and nervous systems and the molecular cross-talk between these two systems.
*Note: Each class will cover a specific topic in neuro-immunology. Students should be prepared to lead discussions on pre-selected papers for each session. More details can be found by going
to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

**Immunology 306qc. Systems Immunology - (New Course)**
Catalog Number: 87129  
Nir Hacohen (Medical School), William Nicholas Haining (Medical School), Christophe O. Benoist (Medical School), and visiting speakers  
Quarter course (spring term). F., 9–11.  
Our focus in this course is on the emerging field of systems immunology. Each session will review a class of experimental approaches, followed by a critical discussion of illustrative papers. Hands-on workshops will introduce students to computational tools for analyzing large-scale datasets, focusing on gene expression.

**Medical Sciences**

*Primarily for Graduates*

**Medical Sciences 250ab. Human Functional Anatomy**
Catalog Number: 6946 Enrollment: Limited to 52. This course requires rental of a locker.  
Lee Gehrke (Medical School)  
Full course (fall term). Lectures, M., W., F., 1:30-2:30; laboratory, M., W., F., 2:30-6; occasional review sessions at 12:15 pm preceding lecture.  
Lectures, detailed laboratory dissections, and prosections provide a thorough exploration of the gross structure and function of the human body. Fundamental principles of embryology and bioengineering promote analytical approaches to understanding the body’s design.  
*Note:* Open to qualified graduate students with permission of the course director. The course has a minimum enrollment of 30. This course requires rental of a locker for two hundred and ten dollars. Offered jointly with the Medical School as HT010.

**Graduate Courses of Reading and Research**

**Medical Sciences 303. Cancer Genomics - (New Course)**
Catalog Number: 45611  
Rameen Beroukhim (Medical School) 7235

**Medical Sciences 310. Advanced Topics in Medical Sciences**
Catalog Number: 7449  
David Lopes Cardozo (Medical School) 5995  
A series of reading and discussion seminars, each running for a half term (seven weeks). Different topics are covered each term.  
*Note:* Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.
*Medical Sciences 399. Topics in Medical Sciences
Catalog Number: 3197
David Lopes Cardozo (Medical School) 5995
Subject selected by students and faculty member.

Quarter Courses for Graduate Students Only

[*Medical Sciences 300qc. Conduct of Science]
Catalog Number: 47879
Raju Kucherlapati (Medical School) 4324
Quarter course (fall term).
Note: Expected to be given in 2013–14. Restricted to GSAS graduate students on the Longwood campus.

*Medical Sciences 301qc. PATHS courses
Catalog Number: 35301
David Lopes Cardozo (Medical School)
Quarter course (fall term; repeated spring term).
A series of career development PATH courses and discussion seminars. Different topics are covered each term.
Note: Limited to the Division of Medical Sciences students. Not for academic credit towards the PhD degree.

[*Medical Sciences 302qc. Conduct of Science Refresher] - (New Course)
Catalog Number: 16457
Raju Kucherlapati (Medical School)
Quarter course (spring term).
Note: Expected to be given in 2013–14. Restricted to DMS graduate students.

Microbiology and Immunobiology

All courses in Microbiology and Immunobiology are subject to limitation in enrollment and will not be offered unless there is sufficient demand.

Primarily for Graduates

Microbiology 201. Molecular Biology of the Bacterial Cell
Catalog Number: 38739
David Z. Rudner (Medical School), Thomas G. Bernhardt (Medical School), Simon L. Dove (Medical School), and Ann Hochschild (Medical School)
Half course (spring term). Tu., Th., 10–12.
This course is devoted to bacterial structure, physiology, genetics, and regulatory mechanisms. The class consists of lectures and group discussions emphasizing methods, results, and interpretations of classic and contemporary literature.
[Microbiology 202. Molecular Basis of Bacterial Pathogenesis and Host Response]
Catalog Number: 23632
John J. Mekalanos (Medical School), Michael S. Gilmore (Medical School), Marcia Goldberg (Medical School), Darren E. Higgins (Medical School), Suzanne Walker (Medical School), Stephen Lory (Medical School), Gerald Pier (Medical School), Eric J. Rubin (Medical School), and Michael Starnbach (Medical School)
Overview of classic paradigms in bacterial-host interactions. Discussions of pathogenic strategies and mechanisms used by representative bacterial pathogens during infection and innate and adaptive host immune defenses. Emphasis on the analysis of published work. 
Note: Expected to be given in 2013–14.

*Microbiology 205. Mechanisms of Microbial Pathogenesis
Catalog Number: 2480 Enrollment: Limited to 40.
Clyde S. Crumpacker II (Medical School) and members of the Department
Half course (fall term). Tu., Th., 8:30-1.
The mechanisms of bacterial, mycoplasmal, fungal, and viral pathogenesis are covered. Topics are selected for intrinsic interest and cover the spectrum of pathophysiologic mechanisms of the infectious process. Emphasis on pathogenesis at the molecular level.
Note: Offered jointly with the Medical School as HT 040.
Prerequisite: A background course in molecular biology is strongly encouraged.

Catalog Number: 63006 Enrollment: Limited to 30.
Michael S. Gilmore (Medical School)
Half course (spring term). F., at 8:30, F., 9:45–11:45.
This is an interdisciplinary graduate-level and advanced undergraduate-level course in which students explore topics in molecular microbiology, microbial diversity, and microbially-mediated geochemistry in depth. This course will be taught by faculty from the Microbial Sciences Initiative. Topics include the origins of life, biogeochemical cycles, microbial diversity, and ecology.
Note: Co-listed as Oraganismic and Evolutionary Biology 290
Prerequisite: For advanced undergraduates, Life Sciences 1a and 1b are required, or permission of instructor. MCB 52 is recommended.

Microbiology 213. Social Issues in Biology
Catalog Number: 7905 Enrollment: Limited to 20.
Jonathan R. Beckwith (Medical School) and Roberto G. Kolter (Medical School)
Discussion course on topics selected from the following: history, philosophy of science; evolution vs. creationism; genetics and race; women and science; genetic testing; science journalism; genetics and criminality; science in wartime; scientists and social responsibility; theater and the public presentation of science.
Note: Offered jointly with the Medical School as MG 722.0. Alternates yearly between the Longwood and the Cambridge Campuses.
Prerequisite: Some background in genetics.
Graduate Courses of Reading and Research

Primarily designed for work on a dissertation problem, carried out under the supervision of the following faculty members, whose special research interests are listed. Courses in parasitology are listed in the catalog of the Harvard School of Public Health (see Pathology).

*Microbiology 300. Advanced Topics in Microbiology and Molecular Genetics
Catalog Number: 2304
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks). Two seminars, which can be taken in different terms, are required for credit.
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0605 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.
Prerequisite: Dependent on seminar.

*Microbiology 304. Molecular Pathogenesis of Streptococcal Infection
Catalog Number: 9527
Michael R. Wessels (Medical School) 4540

*Microbiology 305. Molecular Determinants of Intracellular Bacterial Pathogenesis
Catalog Number: 3190
Darren E. Higgins (Medical School) 2963

*Microbiology 307. Growth Factors and Signal Transduction
Catalog Number: 5726
Charles D. Stiles (Medical School) 4828

*Microbiology 308. Bacterial/Host Interactions in Symbiosis and Pathogenesis
Catalog Number: 4217
Dennis L. Kasper (Medical School) 4815

*Microbiology 310. Bacterial Genetics of Tuberculosis and Tularemia
Catalog Number: 7652
Eric J. Rubin (Medical School) 4084

*Microbiology 312. Acquired and Innate Immunity to Pneumococci
Catalog Number: 78191
Richard Malley (Medical School) 6461

*Microbiology 313. T-Lymphocyte Responses to Bacterial Pathogens
Catalog Number: 4959
Michael Starnbach (Medical School) 1816

*Microbiology 316. Host Pathogen Interactions
Catalog Number: 7769
Stephen Lory (Medical School) 4326
*Microbiology 317. Molecular Mechanisms in Pathogenesis  
Catalog Number: 8985  
John J. Mekalanos (Medical School) 7315

*Microbiology 318. RNA Structure, RNA-protein Interactions, and Translation-level Gene Regulation in RNA Viruses  
Catalog Number: 1205  
Lee Gehrke (Medical School) 8036

*Microbiology 320. Molecular Biology of Herpes Viruses  
Catalog Number: 3967  
David M. Knipe (Medical School) 7089

*Microbiology 321. Molecular Biology of Bacterial Interactions  
Catalog Number: 2903  
Roberto G. Kolter (Medical School) 7727

*Microbiology 322. Biochemistry of Bacterial Toxins  
Catalog Number: 4970  
R. John Collier (Medical School) 7972

*Microbiology 324. Bacterial Pathogenesis and Vaccine Development  
Catalog Number: 3472  
Gerald Pier (Medical School) 2853

*Microbiology 325. Signal Transduction, Host-Microbial Interactions and Immunology  
Catalog Number: 2839  
Scott Brian Snapper (Medical School) 4969

*Microbiology 326. Biology and virulence of enteric pathogens  
Catalog Number: 4703  
Matthew K. Waldor (Medical School) 5919

*Microbiology 328. Molecular Biology of Epstein Barr Virus Infection and Transformation of B Lymphocytes  
Catalog Number: 3188  
Elliott D. Kieff (Medical School) 1858

*Microbiology 329. The Regulation of Gene Expression in Pathogenic Bacteria  
Catalog Number: 5892  
Simon L. Dove (Medical School) 4953

*Microbiology 330. Bacterial chromosome dynamics and cell biology  
Catalog Number: 5102  
David Z. Rudner (Medical School) 4968
*Microbiology 331. Modeling Mechanisms of Bacterial Pathogenesis  
Catalog Number: 1929  
*Cammie Lesser (Medical School) 4962

*Microbiology 332. Gene Regulation of Prokaryotes  
Catalog Number: 0915  
*Ann Hochschild (Medical School) 2314

*Microbiology 334. Primate Lentiviral Immunology and Pathogenesis  
Catalog Number: 8398  
*David T. Evans (Medical School) 5353

*Microbiology 335. Molecular Biology of Parasites  
Catalog Number: 0528  
*Dyann F. Wirth (Public Health) 2492

*Microbiology 336. Pathogen-host Interactions  
Catalog Number: 3981  
*Marcia Goldberg (Medical School) 3783

*Microbiology 337. Mycobacterial Signal Transduction and Transcription Regulation  
Catalog Number: 5826  
*Robert Husson (Medical School) 5914

*Microbiology 339. Bacterial Cell Division and Cell Biology  
Catalog Number: 7237  
*Thomas G. Bernhardt (Medical School) 5752

*Microbiology 341. Molecular Biology Multi-drug Resistant Pathogens  
Catalog Number: 88249  
*Michael S. Gilmore (Medical School) 6227

*Microbiology 343. Chemical Biology, Enzymology, Antibiotics, Glycosyltransferases, Inhibitors  
Catalog Number: 2963  
*Suzanne Walker (Medical School) 5087

*Microbiology 344. Chemistry and Biology of Host-Virus Interactions  
Catalog Number: 8853  
*Priscilla Yang (Medical School) 5156

*Microbiology 346. Genetics of Bacterial Adhesion and Pathogenesis  
Catalog Number: 5690  
*Paula I. Watnick (Medical School) 5666
*Microbiology 347. Chemical Genetics Approach to Bacterial Pathogenesis
Catalog Number: 2308
Deborah Tan Hung (Medical School) 5701

*Microbiology 348. Toll-like Receptors and Innate Immunity
Catalog Number: 9708
Jonathan C. Kagan (Medical School) 6235

*Microbiology 349 (formerly Pathology 302). Molecular Mechanisms of Leukocyte Trafficking
Catalog Number: 10956
Ulrich H. Von Andrian-Werburg (Medical School) 2090

*Microbiology 350 (formerly Pathology 324). Regulation of T-cell Mediated Immune Response
Catalog Number: 77585
Arlene H. Sharpe (Medical School) 1588

*Microbiology 351 (formerly Pathology 303). Viral Pathogenic and Transformation Mechanisms
Catalog Number: 92692
Peter M. Howley (Medical School) 1076

*Microbiology 352 (formerly Pathology 375). The Biology of microRNAs and their Dysregulation in Cancers
Catalog Number: 56277
Carl D. Novina (Medical School) 5356

*Microbiology 353. Development and delivery of RNA therapeutics - (New Course)
Catalog Number: 43059
Michael Goldberg (Medical School) 7037

Quarter Courses for Graduate Students Only

*Microbiology 300qc. Advanced Topics in Microbiology and Molecular Genetics
Catalog Number: 62986
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks).
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Microbiology 301qc. Molecular Mechanisms of Microbial Pathogenesis
Catalog Number: 76052 Enrollment: Limited to 15.
Marcia Goldberg (Medical School) 3783 and Simon L. Dove (Medical School)
Quarter course (spring term). TBA.
During infection, microbial pathogens employ sophisticated mechanisms to enhance infection or dissemination. This course will focus on the recent literature on molecular mechanisms involved in bacteria pathogenesis during host-pathogen interactions. 

*Note:* More details can be found by going to the [Division of Medical Sciences website](#), then clicking Current Students and selecting Quarter Courses.

**Microbiology 302qc. Introduction to Infectious Disease Research: Infectious Diseases Consortium Boot Camp - (New Course)**
Catalog Number: 96439  
_Eric J. Rubin (Medical School) 4084 and Members of the Department_  
Quarter course (spring term). M. through F., 9–5.  
This intensive January course provides an introduction to the breadth of infectious disease research carried out at Harvard. Students will learn techniques for studying infectious diseases, more about different types of infectious diseases, and meet faculty, students, and postdocs in infectious diseases labs at Harvard. 

*Note:* More details can be found by going to the [Division of Medical Sciences website](#), then clicking Current Students and selecting Quarter Courses.

**Neurobiology**

The Program in Neuroscience offers multidisciplinary training in the neurosciences leading to the PhD degree. Course instruction and supervision of dissertation research is provided by faculty of the Department of Neurobiology at Harvard Medical School as well as faculty of other departments at Harvard Medical School (and its affiliated medical institutions) and the Faculty of Arts and Sciences.

Courses at the 200 level may be open to advanced undergraduates with permission of the instructor. Additional courses open to undergraduates are offered by the Neurobiology concentration, listed separately.

**Primarily for Graduates**

**Neurobiology 200, Neurobiology**
Catalog Number: 6062 Enrollment: Limited to 50.  
_Richard H. Masland (Medical School), John A. Assad (Medical School), David Lopes Cardozo (Medical School), David P. Corey (Medical School), Matthew P. Frosch (Medical School), Rosalind A. Segal (Medical School), and Ziv Williams (Medical School)_  
_Half course (fall term). M., W., F., 9-12. EXAM GROUP: 2, 3, 4_  
This is a comprehensive course in Neuroscience. Basic principles of organization and function of the nervous system will be discussed with frequent reference to pathophysiology of neurological and psychiatric disorders. Combining pathophysiology with basic neuroscience should provide physician/scientists and Ph.D. candidates with a dynamic picture of the rapidly evolving field of neuroscience and the experimental process from which the picture is derived, and all students should emerge with a greater awareness both of the applications of their work in alleviating disease, and of the ways that disease can provide insight into basic scientific questions. The course will span modern neuroscience from molecular neurobiology to perception and cognition,
and will include the following major topics: Anatomy and Development of the Brain; Cell Biology of Neurons and Glia; Ion Channels and Electrical Signaling; Synaptic Transmission, Integration, and Chemical Systems of the Brain; Sensory Systems, from Transduction to Perception; Motor Systems; and Higher Brain Function (Memory, Language, Affective Disorders).

Note: Offered jointly with the Medical School as HT 130. Follows the Medical School calendar. Nine hours of lecture or lab/conference weekly.

Prerequisite: Introductory cell and molecular biology course and permission of instructor.

Neurobiology 204. Neurophysiology of Central Circuits
Catalog Number: 5603
Rachel I. Wilson (Medical School), John A. Assad (Medical School), Richard T. Born (Medical School), Michael Tri Hoang Do (Medical School), Christopher D. Harvey (Medical School), Gabriel Kreiman (Medical School), Margaret S. Livingstone (Medical School), and John Maunsell (Medical School)
Half course (spring term). M., W., 10-12.
This course introduces major themes and fundamental concepts underlying current research in systems neuroscience. Each week covers a different theme, and draws on research from different sensorimotor modalities and model organisms.

Note: Offered jointly with the Medical School as NB 721.0.
Prerequisite: Neurobiology 200 or with permission of instructor.

Neurobiology 207. Developmental Neurobiology
Catalog Number: 4977 Enrollment: Limited to 20.
Lisa V. Goodrich (Medical School), Michela Fagiolini (Medical School), Chenghua Gu (Medical School), and Beth Stevens (Medical School)
Half course (spring term). F., 10–12, W., 2–4.
Advanced topics in nervous system development, including cell fate determination, axon guidance, synapse development and critical periods. Focus on current areas of investigation, unresolved questions, and common experimental approaches.

Note: Offered jointly with the Medical School as NB 720.0. Students will read and discuss primary literature in the discussion sessions. Emphasis will be given to learning how to identify an important question and develop a feasible research plan, including a lecture on how to write a grant proposal and a mock study section. The final exam consists of a grant proposal; grades will also be determined by successful completion of homework assignments and class participation.
Prerequisite: Neurobiology 200 or with permission of instructor.

[Neurobiology 209. Neurobiology of Disease]
Catalog Number: 5562
Edward A. Kravitz (Medical School) and members of various clinical departments
Half course (spring term). M., 6-8:30 pm, W., 7-9:30 pm.
Monday sessions involve patient presentations and “core” lectures describing clinical progression, pathology, and basic science underlying a major disease or disorder. Wednesdays, students present material from original literature sources, and there is general discussion.

Note: Expected to be given in 2013–14. Given in alternate years. Offered jointly with the Medical School as NB 713.0. For advanced undergraduate, graduate students, MD and MD/PhD
students.

Prerequisite: Introductory neurobiology, biochemistry, and genetics/molecular biology recommended.

**Neurobiology 220. Cellular Neurophysiology**
Catalog Number: 2141
Bruce P. Bean (Medical School), Wade G. Regehr (Medical School), Bernardo L. Sabatini (Medical School), and Gary I. Yellen (Medical School)
Half course (fall term). Tu., Th., 9–12.
Introduction to the physiology of neurons, focusing on using electrophysiology and imaging to study function of ion channels, generation of action potentials, and physiology of synaptic transmission. Includes problem sets and reading of original papers.
Note: Offered jointly with the Medical School as NB 714.0.
Prerequisite: Introductory neurobiology.

**Neurobiology 221. Molecular Neurobiology**
Catalog Number: 0443
Sandeep Robert Datta (Medical School), Jonathan B. Cohen (Medical School), Pascal Kaeser (Medical School), and Joshua M. Kaplan (Medical School)
Half course (spring term). Tu., Th., 10-12.
Molecular biology and genetics of the nervous system. Emphasis on importance of ligand-receptor interactions and receptor regulation for the function of the nervous system and on the mechanisms of storage and release of neurotransmitters.
Note: Offered jointly with the Medical School as NB 715.0.
Prerequisite: Introductory neurobiology and molecular biology. Permission of the instructor required for undergraduates.

**Neurobiology 230. Visual Object Recognition**
Catalog Number: 78454
Gabriel Kreiman (Medical School)
Examines how neuronal circuits represent information and how those circuits are implemented in artificial intelligence algorithms. Topics: architecture of visual cortex, neurophysiology, visual consciousness, computational neuroscience, models of pattern recognition and computer vision.
Prerequisite: Life Sciences 1a (or Life and Physical Sciences A) and Life Sciences 1b (or equivalent). Recommended: Math (Maa/Mab, Math 1A,1B, Math 19 a or equivalent). Physical Sciences 1. MCB 80.

**Cross-listed Courses**

*Psychology 2060. Reward and Self Control - (New Course)*

**Graduate Courses of Reading and Research**

*Neurobiology 300. Advanced Topics in Neurobiology*
Catalog Number: 6206
David Lopes Cardozo (Medical School) 5995 and members of the Department
Topics cover areas at the molecular, cellular, and systems levels in both basic and clinical neuroscience. A series of reading and discussion seminars, each running for a half term (seven weeks).

Note: Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Neurobiology 301. Visual Object Recognition: Computational Models and Neurophysiological Mechanisms
Catalog Number: 8402
Gabriel Kreiman (Medical School) 6174

*Neurobiology 302. Attention and Representation of Sensory Information in Cerebral Cortex
Catalog Number: 9850
John Maunsell (Medical School) 5670

*Neurobiology 303. Development, Function, and Disease State of the Inner Ear
Catalog Number: 0660
Zheng-Yi Chen (Medical School) 5478

*Neurobiology 304. Behavioral Genetic Studies of Aggression in Drosophila
Catalog Number: 5467
Edward A. Kravitz (Medical School) 2063

*Neurobiology 305. Cellular and Molecular Mechanisms of Epilepsy, Autism, and Postnatal Circuit Development
Catalog Number: 1349
Matthew Peter Anderson (Medical School ) 6691

*Neurobiology 306. The Molecular Mechanisms of How Neural and Vascular Networks are Coordinately Developed
Catalog Number: 0992
Chenghua Gu (Medical School) 5479

*Neurobiology 307. Architecture and plasticity of neurotransmitter release sites
Catalog Number: 77741
Pascal Kaeser (Medical School) 6467

*Neurobiology 308. Molecular Mechanisms of Catecholaminergic-specific Gene Regulation
Catalog Number: 6125
Kwang-Soo Kim (Medical School) 3046
*Neurobiology 309. Neural Circuitry in Schizophrenia  
Catalog Number: 3823  
*Francine M. Benes (Medical School) 1869

*Neurobiology 310. Neural Coding of Chemosensory Stimuli  
Catalog Number: 2408  
*Rachel I. Wilson (Medical School) 5257

*Neurobiology 311. Cellular and Molecular Studies of Synapse Formation in the Vertebrate Nervous System  
Catalog Number: 0081  
*Joshua R. Sanes 5094 (on leave spring term)

*Neurobiology 312. Studies of synaptic circuitry and their rearrangements  
Catalog Number: 0082  
*Jeff W. Lichtman 5163 (on leave spring term)

*Neurobiology 313. Molecular Biology of Mammalian Circadian Clocks  
Catalog Number: 1758  
*Charles J. Weitz (Medical School) 1139

*Neurobiology 314. Cellular Mechanism(s) of Axon Guidance  
Catalog Number: 1742  
*Mustafa Sahin (Medical School) 6175

*Neurobiology 315. Neurotrophic Factors in Development: Functions and Mechanisms of Action  
Catalog Number: 0128  
*Rosalind A. Segal (Medical School) 1564

*Neurobiology 317. Molecular genetic dissection of circuit assembly and morphogenesis  
Catalog Number: 4979  
*Lisa V. Goodrich (Medical School) 4771

*Neurobiology 318. Molecular Genetics of Cerebral Cortical Development  
Catalog Number: 0825  
*Christopher A. Walsh (Medical School) 1560

*Neurobiology 319. Neurological Control of Cell Growth and Differentiation  
Catalog Number: 2991  
*Michael E. Greenberg (Medical School) 1400

*Neurobiology 320. Neuroprotection and Neuronal Repair in Neurodegenerative Disease  
Catalog Number: 4825  
*Ole S. Isacson (Medical School) 2077
*Neurobiology 320L. Neural circuits underlying cognitive behaviors in mice - (New Course)
Catalog Number: 31157
Christopher D. Harvey (Medical School) 6140

Catalog Number: 5387
Margaret S. Livingstone (Medical School) 1064

*Neurobiology 321L (formerly *Neurobiology 321l). Multi-modal, multiscalar studies of human neurophysiology from single neurons to neuronal ensembles. - (New Course)
Catalog Number: 72929
Sydney S. Cash (Medical School) 7010

*Neurobiology 322L. Molecular mechanisms of reward-related behavior - (New Course)
Catalog Number: 88657
Elena Halley Chartoff (Medical School) 7012

*Neurobiology 323. Synaptic Plasticity
Catalog Number: 3209
Florian Engert 4290

*Neurobiology 323L (formerly *Neurobiology 323l). Sensory Transduction in Hair Cells of the Mammalian Inner Ear - (New Course)
Catalog Number: 17369
Jeffrey Robb Holt (Medical School) 7023

*Neurobiology 324. Research in Neuropeptide Gene Regulation
Catalog Number: 4057
Joseph A. Majzoub (Medical School) 1875

*Neurobiology 324L. Neuroscience and Genetics of Human Variation in Reward and Self-Control - (New Course)
Catalog Number: 60914
Joshua William Buckholtz 1653

*Neurobiology 325. Synaptic Transmissions and Dendritic Processing
Catalog Number: 2065
Wade G. Regehr (Medical School) 1606

*Neurobiology 325L. Genetic dissection of inhibitory modulation in the central nervous system - (New Course)
Catalog Number: 51945
Uwe Rudolph (Medical School) 7049
*Neurobiology 326. Age-Dependent Mechanisms of Perinatal Brain Injury  
Catalog Number: 2469  
Frances E. Jensen (Medical School) 3940

*Neurobiology 326L. Extracellular matrix/neuron/glia interactions in the pathophysiology of schizophrenia and bipolar disorder. - (New Course)  
Catalog Number: 94951  
Sabina Berretta (Medical School) 7087

*Neurobiology 327. Rotation Course in Neurosciences  
Catalog Number: 5694  
Richard T. Born (Medical School) 1787  
Note: Primarily for students in Neuroscience.

*Neurobiology 327L. Lab Rotations in Neurosciences - (New Course)  
Catalog Number: 23382  
Richard T. Born (Medical School) 1787

*Neurobiology 328. Mechanisms of Cell Death in Stroke and Trauma  
Catalog Number: 8967  
Eng H. Lo (Medical School) 3049

*Neurobiology 328L. Role of Sleep in Memory and Emotional Processing in Healthy Subjects, Schizophrenia, Autism, and PTSD - (New Course)  
Catalog Number: 65645  
Robert A. Stickgold (Medical School) 3274

*Neurobiology 329. Molecular Mechanisms of Neurodegeneration in Alzheimer’s and Parkinsons Diseases  
Catalog Number: 8816  
Dennis J. Selkoe (Medical School) 2857

*Neurobiology 329L. The Genetic and Neural Basis of Sleep in Drosophila - (New Course)  
Catalog Number: 28832  
Dragana Rogulja (Medical School) 7133

*Neurobiology 330. Gene Expression in the Brain and Motivated Behavior  
Catalog Number: 6269  
William A. Carlezon (Medical School) 3929

*Neurobiology 330L. Translational Genomics of Parkinsons Disease: Cause, Cures, Diagnostics - (New Course)  
Catalog Number: 55087  
Clemens Scherzer (Medical School) 7131
**Neurobiology 331. Neural Differentiation, Regeneration and Stem Cell Regulation in the Brain and Eye**  
Catalog Number: 9045  
*Dong Feng Chen (Medical School)* 3930

**Neurobiology 331L. Motivational Influences on Cortical Networks Underlying Attention, Learning and Memory of Sensory Cues - (New Course)**  
Catalog Number: 73341  
*Mark Lawrence Andermann (Medical School)* 7130

**Neurobiology 332. Ligand-Gated Ion Channels: Structure and Function**  
Catalog Number: 1623  
*Jonathan B. Cohen (Medical School)* 1120

**Neurobiology 332L. Biological and computational underpinnings of visual processing - (New Course)**  
Catalog Number: 96616  
*David Cox* 7161

**Neurobiology 333. Intercellular Communication**  
Catalog Number: 2484  
*David L. Paul (Medical School)* 2318

**Neurobiology 333L. Behavioral and synaptic plasticity in neuropsychiatric disorders; mechanisms of axon guidance and synapse elimination in autism - (New Course)**  
Catalog Number: 38811  
*Christopher William Cowan (Medical School)* 7179

**Neurobiology 334. Hair Cells and Afferent Neurons of the Inner Ear**  
Catalog Number: 1134  
*Ruth Anne Eatock (Medical School)* 5739

**Neurobiology 334L. Cellular and Molecular Mechanisms of Cortical Circuit Assembly - (New Course)**  
Catalog Number: 89186  
*Corey Harwell (Medical School)*

**Neurobiology 335. Physiological Function and the Pathogenetic Actions of Genes Implicated in Neurodegenerative Diseases - (New Course)**  
Catalog Number: 20122  
*Mark William Albers (Medical School)* 7202

**Neurobiology 336. Developmental Cognitive Neuroscience, Focusing Primarily on Memory and Face Processing.**  
Catalog Number: 2242  
*Charles A. Nelson (Public Health)* 5480
*Neurobiology 337. Neurobiology of the Human Circadian Pacemaker  
Catalog Number: 5322  
Charles A. Czeisler (Medical School) 7763

*Neurobiology 338. Neural Circuitry of Primate Visual Cortex  
Catalog Number: 5634  
Richard T. Born (Medical School) 1787

*Neurobiology 339. Mechanisms of Central Synaptic Transmission  
Catalog Number: 9322  
Vadim Bolshakov (Medical School) 4948

*Neurobiology 341. Cognition and Cognitive Disorders; the Role of Translational Regulation  
Catalog Number: 8790  
Raymond J. Kelleher (Medical School) 5740

*Neurobiology 342. Neurophysiology of Visual Cortex and LGN  
Catalog Number: 2778  
R. Clay Reid (Medical School) 2957

*Neurobiology 343. Neuronal Metabolism and Excitability; Molecular Physiology of Ion Channels  
Catalog Number: 1887  
Gary I. Yellen (Medical School) 3268

*Neurobiology 344. Neurobiology and protein biochemistry underlying Parkinson’s disease.  
Catalog Number: 38211  
Matthew James Lavoie (Medical School) 2640

*Neurobiology 345. Molecular Basis of Neuron Glia Interactions  
Catalog Number: 4918  
Gabriel Corfas (Medical School) 2907

*Neurobiology 346. Visual Processing in Primates  
Catalog Number: 0184  
John A. Assad (Medical School) 2985

*Neurobiology 347. Alzheimer’s Disease Research  
Catalog Number: 6606  
Bradley T. Hyman (Medical School) 2952

*Neurobiology 348. Neural stem cells and cerebrospinal fluid - (New Course)  
Catalog Number: 11112  
Maria Kristiina Lehtinen (Medical School) 6465
*Neurobiology 349. Olfactory and Vomeronasal Systems Molecular and Developmental Neurobiology
Catalog Number: 1416
Catherine Dulac 2801

*Neurobiology 350. Molecular Genetics of Neuronal Development
Catalog Number: 2038
Constance L. Cepko (Medical School) 1150

*Neurobiology 351. Neurogenetics of Disease
Catalog Number: 3008
Louis M. Kunkel (Medical School) 1330

*Neurobiology 353. Physiology, with an emphasis on ion channels, signal transduction, and imaging
Catalog Number: 3689
David E. Clapham (Medical School) 2987

*Neurobiology 354. Structural Biology of Signaling and Transport Through Biological Membranes
Catalog Number: 9454
Rachelle Gaudet 4413

*Neurobiology 355. A Biophysical Approach to System Function
Catalog Number: 33133
Michael Tri Hoang Do (Medical School) 6909

*Neurobiology 356. Ion Channels in Neural Cell Membranes
Catalog Number: 8368
David P. Corey (Medical School) 1345

*Neurobiology 357. Experience-Dependent Neuronal Circuit Maturation and Plasticity
Catalog Number: 6674
Michela Fagiolini (Medical School) 5751

*Neurobiology 358. Neurogenetics of Human Disease
Catalog Number: 7616
Xandra O. Breakefield (Medical School) 1428

*Neurobiology 359. Functional Characterization of Neural Circuits
Catalog Number: 23173
Sandeep Robert Datta (Medical School) 6518

*Neurobiology 360. Neural Signal Processing and Mechanisms of General Anesthesia
Catalog Number: 8525
Emery N. Brown (Medical School) 1399
*Neurobiology 361. Immunobiology of the Nervous System and its Tumors  
Catalog Number: 7282  
Lois A. Lampson (Medical School) 2491

*Neurobiology 362. Optical imaging in Alzheimer’s disease  
Catalog Number: 5030  
Brian Bacskai (Medical School) 6693

*Neurobiology 363. Axonal Development and Reorganization  
Catalog Number: 7089  
Larry I. Benowitz (Medical School) 3150

*Neurobiology 364. hypothalamic circuitry controlling sleep and circadian rhythms  
Catalog Number: 1523  
Clifford B. Saper (Medical School) 3394

*Neurobiology 365. Behavioral Pharmacology of Stimulant Drugs and Brain Dopamine  
Systems as they relate to Psychiatric Disorders.  
Catalog Number: 8902  
S. Barak Caine (Medical School) 5477

*Neurobiology 366. Functional Organization of the Retina  
Catalog Number: 7391  
Richard H. Masland (Medical School) 4923

*Neurobiology 367. Neocortical Development and Regeneration  
Catalog Number: 4252  
Jeffrey D. Macklis 3396

*Neurobiology 369. Function of Neural Circuits  
Catalog Number: 1828  
Markus Meister 3007

*Neurobiology 370. Genetic and Molecular Studies of Neurodegenerative Diseases  
Catalog Number: 8336  
Rudolph E. Tanzi (Medical School) 2683

*Neurobiology 371. Sensory Neuron Development and Sleep Using Genetics and Live  
Imaging in Zebrafish.  
Catalog Number: 7081  
Alexander F. Schier 5238

*Neurobiology 372. Neurotransmitter Control of Ion Channels  
Catalog Number: 7104  
Bruce P. Bean (Medical School) 1148
*Neurobiology 373. Developmental Studies of the Murine Trigeminal Sensory System  
Catalog Number: 7485  
Qiufu Ma (Medical School) 3034

*Neurobiology 374. Molecular Basis of Alzheimer’s Disease & Parkinson’s Disease  
Catalog Number: 9022  
Jie Shen (Medical School) 3059

*Neurobiology 375. Mechanisms of Synaptic Transmission & Plasticity  
Catalog Number: 0790  
Venkatesh N. Murthy 2424 (on leave fall term)

*Neurobiology 376. Genetics of Neuronal Cell Biology  
Catalog Number: 2911  
Thomas L. Schwarz (Medical School) 3923

*Neurobiology 377. Physiological Studies of Phototransduction and Light Adaptation  
Catalog Number: 6897  
Clint L. Makino (Medical School) 3946

*Neurobiology 378. Neuronal Mechanisms and Animal Behavior  
Catalog Number: 9659  
Naoshige Uchida 5745

*Neurobiology 379. Growth Factor Regulation of Neural Development and Oncogenesis  
Catalog Number: 7751  
Scott L. Pomeroy (Medical School) 3947

*Neurobiology 380. Functional Wiring of the Rabbit Retina, Control of Postnatal Development  
Catalog Number: 4965  
Elio Raviola (Medical School) 3582

*Neurobiology 381. Glutamate Transporters, Cell Death, Sleep/Wake Regulation  
Catalog Number: 6912  
Paul Allen Rosenberg (Medical School) 3949

*Neurobiology 382. Hypothalamus and Melanin Concentrating Hormone in the Regulation of Energy Homeostasis  
Catalog Number: 1457  
Eleftheria Maratos-Flier (Medical School) 4327

*Neurobiology 383. Role of the Basal Ganglia in Learning and Motivation  
Catalog Number: 0492  
Emad Eskandar (Medical School) 6176
*Neurobiology 384. Neuroscience of human emotions and emotional disorders
Catalog Number: 89733
Diego Pizzagalli (Medical School) 4425

*Neurobiology 385. Mammalian Gap Junctions, Inhibitory Neuronal Networks, and Corticothalamic Processing
Catalog Number: 1296
Carole Landisman (Medical School) 5787

*Neurobiology 386. Changes in Sensory Neurons that Contribute to Pain
Catalog Number: 7609
Clifford Woolf (Medical School) 3956

*Neurobiology 387. Development and Plasticity of Auditory Cortex
Catalog Number: 20829
Daniel B. Polley (Medical School) 6881

*Neurobiology 389. Molecular Regulation of Neural Tube Development
Catalog Number: 3914
Mary R. Loeken (Medical School) 3151

*Neurobiology 390. Mechanisms of Synapse Regulation
Catalog Number: 9202
Bernardo L. Sabatini (Medical School) 4300

*Neurobiology 392. Synaptic Plasticity in the CNS
Catalog Number: 6750
Chinfei Chen (Medical School) 4437

*Neurobiology 393. Genetic Disorders of Axon Growth and Guidance
Catalog Number: 3085
Elizabeth C. Engle (Medical School) 4312

*Neurobiology 394. Human Memory Processing and Brain State
Catalog Number: 23915
Edwin Malcolm Robertson (Medical School) 6565

*Neurobiology 395. Neuron-Glia Interactions During Development & Disease; Synapse Development & Plasticity; Neuro-Immune Interactions
Catalog Number: 7993
Beth Stevens (Medical School) 6678

*Neurobiology 396. Critical Period Mechanisms of Experience-Dependent Brain Development
Catalog Number: 0142
Takao K. Hensch 5813
*Neurobiology 397. Nervous System Construction and Function
Catalog Number: 0158
Samuel M. Kunes 3486

*Neurobiology 398. HSV Vectors for Cancer Therapy
Catalog Number: 4438
Samuel D. Rabkin (Medical School) 4772

*Neurobiology 399. Neurocircuits Thought to Regulate Metabolism and Behavior
Catalog Number: 5626
Bradford Barr Lowell (Medical School) 5741

Quarter Courses for Graduate Students Only

*Neurobiology 300qc. Advanced Topics in Neurobiology
Catalog Number: 11464
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks).
Note: Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

[*Neurobiology 301qc. Gene Therapy and Imaging for Nervous System Disorders]*
Catalog Number: 18456 Enrollment: Limited to 12.
Xandra O. Breakefield (Medical School) 1428 and Bakhos A. Tannous
Quarter course (fall term). Tu., 3–5.
Introduction to gene therapy, different techniques in molecular imaging to monitor gene transfer and response to therapy. Discuss trends in gene therapy: viral vectors, siRNA and cell-based therapy, clinical trials for central nervous system disorders.
Note: Expected to be given in 2013–14. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Neurobiology 302qc. Acute and Chronic Pain: Molecular and Cellular Mechanisms, Genetics, and Treatments]*
Catalog Number: 93864 Enrollment: Limited to 12.
Gary R. Strichartz (Medical School)
Quarter course (spring term). W., 4–6.
Neurobiology and pharmacology of acute and chronic pain. Classic and modern approaches to understanding pain mechanisms, from anatomy and neurophysiology of impulse generation and transmission to identification of the target molecules in neurons and glia.
Note: Expected to be given in 2013–14. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

*Neurobiology 303qc. Tools for Statistical Inference in Experimental Science
Catalog Number: 65564 Enrollment: Limited to 35.
Gary I. Yellen (Medical School) 3268
Quarter course (spring term). M., W., F., 3–5.
Introduction to statistical treatment of experimental data, particular reference to problems in neuroscience. Basic topics in statistics, including probability distributions, sampling, hypothesis testing, Bayes’s Theorem, t tests, confidence intervals, and ANOVA and related tests
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Neurobiology 304qc. Regeneration and Repair in the Mammalian Nervous System: Cellular and Molecular Mechanisms]*
Catalog Number: 41092 Enrollment: Limited to 18.
Zhigang He (Medical School) 3910, Larry I. Benowitz (Medical School) 3150, Jeffrey D. Macklis 3396, and Clifford Woolf (Medical School) 3956
Quarter course (spring term). Tu., 5:30–7:30 p.m., or TBA.
Approaches toward mammalian neural regeneration, comparing and contrasting development with adult plasticity/repair. Overview lectures and discussion of primary literature, motivated by motor and sensory circuitry central to spinal cord injury, ALS, and peripheral nerve injury.
Note: Expected to be given in 2013–14. Given in alternate years. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Neurobiology 305qc. Biochemistry and Biology of Neurodegenerative Diseases]*
Catalog Number: 22489 Enrollment: Limited to 20.
Michael S. Wolfe (Medical School) and Matthew C. Lavoie
Quarter course (fall term). Tu., 3:30–5:30.
Biochemistry and biology are integrated to provide a broad perspective on major human neurodegenerative diseases. The biochemistry, enzymology, structural biology and pathology of disease-associated proteins and approaches to developing therapeutics will be examined.
Note: Expected to be given in 2013–14. Given in alternate years. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Neurobiology 306qc. Quantitative Methods for Biologists]*
Catalog Number: 85319 Enrollment: Limited to 80.
Michael Springer, Richard T. Born (Medical School)
Quarter course (fall term; repeated spring term). Hours to be arranged.
The goals of this course are to introduce students to programming in the MATLAB environment and to begin using this tool for analyzing data and for gaining intuition about the behavior of complex systems through the use of numerical simulations.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

[*Neurobiology 307qc. Molecular Causes of Congenital Defects of the CNS]*
Catalog Number: 93018 Enrollment: Limited to 12.
Mary R. Loeken (Medical School)
Quarter course (spring term). Tu., 2–5.
Congenital defects can be caused by inheritance of a defective gene, maternal infection, or
prenatal exposure to environmental teratogens. Use of mutant mouse strains and genomic sequencing have been particularly useful in the rapid proliferation of our understanding of the cellular and molecular mechanisms by which congenital defects of the brain or nervous system arise, and how they lead to functional consequences that range from biochemical abnormalities to gross structural defects.

*Note: Given every three years. More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

**Neurobiology 309qc. The molecular pathology and current therapies for retinal diseases - (New Course)**
Catalog Number: 42626
Dong Feng Chen (Medical School), Kin-Sang Cho (Medical School), and Magali Saint-Geniez (Medical School)
Quarter course (fall term). Hours to be arranged.

**Pathology**

**Primarily for Graduates**

[HBTM 201 (formerly Pathology 209). Tumor Pathophysiology and Transport Phenomena - A Systems Biology Approach]
Catalog Number: 5934
Rakesh K. Jain (Medical School)
Half course (fall term). M., 5-7 pm.
Tumor pathophysiology plays a central role in the growth, metastasis, detection, and treatment of solid tumors. Principles of transport phenomena are applied to develop a quantitative understanding of tumor biology and treatment.

*Note: Expected to be given in 2013–14. Given in alternate years. Offered jointly with the Medical School as PA 712.0. Classes held at MIT.

[Pathology 205. Molecular Biology of the Auditory System]
Catalog Number: 0211
Albert Edge
Half course (fall term). Hours to be arranged.
Advances in molecular biology of hearing. Topics: Transcriptional and post-translational regulation of gene expression; cell fate determination during inner ear development; inner ear stem cells and regenerative capacity in various species; use of genomics in investigations of the inner ear; critical genes for generating functional hair cells.

*Note: Expected to be given in 2013–14. Given in alternate years.
Prerequisite: Introductory courses in neurobiology and molecular biology are recommended.

**Graduate Courses of Reading and Research**
Students are usually not eligible to enroll in one of these courses until they have completed their formal required course work. Research courses are primarily designed for research work on a student’s dissertation problem, carried out under the direct supervision of one of the following faculty members, whose special research interests are listed.

**Pathology 300. Advanced Topics in Pathology**

Catalog Number: 2245  
David Lopes Cardozo (Medical School) 5995

A series of reading and discussion seminars, each running for a half term (seven weeks). Different topics are covered each term.  
*Note:* Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.  
*Prerequisite:* Dependent on seminar.

**Quarter Course for Graduate Students Only**

**Pathology 301qc. The Molecular Bases of Eye Disease**

Catalog Number: 85085  
Darlene Ann Dartt (Medical School) 6904

Quarter course (spring term). M., 3–5.

Understanding of the molecular bases for diseases that target the eye.  
*Note:* More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

**Pharmacology**

For courses pertaining to Pharmacology see listings under the Department of Biological Chemistry and Molecular Pharmacology.

**Speech and Hearing Bioscience and Technology**

**Primarily for Graduates**

**SHBT 200. Acoustics of Speech and Hearing - (New Course)**

Catalog Number: 60388  
Enrollment: Limited to 20. Must have a minimum of 5 students  
John J. Rosowski (Medical School) and Christopher A. Shera (Medical School)

Half course (fall term). W., at 12, Tu., Th., 1–2:30.

Discusses limitations that the speech production and hearing systems impose on the sounds we produce and sense. Focuses on acoustic cues used in sound localization, speech production mechanisms, the mechanics of sound reception and perception.  
*Note:* This course is taught in consort with 6.551J/HST.714J at the Massachusetts Institute of Technology. Classes will be held at MIT.  
*Prerequisite:* Mathematical methods in science (Applied Mathematics 21a or Mathematics 21a) or equivalent. Rigid body mechanics (Physics 11A), or electrical circuits (Engineering Science 154) or permission of the instructor.
**SHBT 201. Biology of the Inner Ear - (New Course)**
Catalog Number: 75495 Enrollment: Limited to 12.
*M. Charles Liberman (Medical School) and Ruth Anne Eatock (Medical School)*
Half course (fall term). Tu., Th., 9–10:30, F. laboratory hours to be arranged. EXAM GROUP: 11, 12
Normal biology, biophysics, physiology and morphology of the inner ear, its sensory innervation and efferent control systems, and the mechanisms underlying sensorineural hearing loss and balance disorders. Material is presented through lectures, laboratory exercises and discussions of the primary literature.
**Prerequisite:** Introductory neurobiology recommended

**SHBT 202. Clinical Aspects of Hearing and Speech - (New Course)**
Catalog Number: 69294 Enrollment: Limited to 15. Minimum of 5
*Joseph B. Nadol (Medical School), Ramon A. Franco (Medical School), Sharon G. Kujawa (Medical School), Konstantina Stankovic (Medical School), and Conrad Wall (Medical School)*
Half course (spring term). M., W., 5–7 p.m. Clinical observations Mon-Fri 8am-3pm.
Clinical approach to speech and hearing disorders as practiced by physicians, audiologists, speech clinicians, rehabilitation specialists, bioengineers. Includes observation of patient care in clinic and operating room, audiology/balance disorders experience, lectures and discussion groups.
**Note:** Offered jointly with HST 724 at MIT. Classes to be held at the Massachusetts Eye and Ear Infirmary (MEEI)
**Prerequisite:** Anatomy of Speech and Hearing, Acoustics of Speech and Hearing or permission of the course director

**SHBT 203. Anatomy of Speech and Hearing - (New Course)**
Catalog Number: 17772 Enrollment: Limited to 12.
*Barbara C. Fullerton (Medical School), James Tracey Heaton (Medical School), and James Bradley Kobler (Medical School)*
Half course (spring term). January Course. Hours to be arranged.
This course covers anatomy of the head and neck, with cadaver dissection, stressing structures important in speech and hearing. Lecture topics also include basic neuroanatomy, imaging, surgery, and cancer of head and neck.
**Note:** Offered jointly with MIT as HST 718. Classes to be held at the Harvard Medical School campus (HMS)
**Prerequisite:** Introductory biology or equivalent and permission of the course director

**SHBT 204. Speech Communication - (New Course)**
Catalog Number: 47986 Enrollment: Limited to 20.
*Robert E. Hillman (Medical School) and other faculty*
Half course (spring term). Tu., Th., 11–12:30.
Survey of human speech communication. Acoustic theory of speech production; physiologic and acoustic descriptions of phonetic features, prosody, voice and speech perception and speech motor control. Applications to recognition, synthesis and speech disorders.
**Note:** Offered jointly with MIT course HST.710. Classes to be held at MIT.
**Prerequisite:** Background equivalent to MIT HST.714.
**SHBT 205. Neural Coding and Perception of Sound - (New Course)**
Catalog Number: 63093 Enrollment: Limited to 20.
*Bertrand Delgutte (Medical School), M. Christian Brown (Medical School), Donald Keith Eddington (Medical School), John J. Guinan (Medical School), Jennifer R. Melcher (Medical School), and Daniel B. Polley (Medical School)*
*Half course (spring term). M., W., 9:30–11:30, Occasional lab on Friday. EXAM GROUP: 2, 3, 4*
Neural structures and mechanisms mediating the detection, localization and recognition of sounds. General principles are conveyed by theme discussions of auditory masking, sound localization, musical pitch, cochlear implants, and auditory scene analysis.
*Note: Offered jointly with MIT HST.723J. Classes to be held at the Harvard Medical School campus (HMS).*
*Prerequisite: Neurobiology 200 or Permission of the instructor.*

**Graduate Courses of Reading and Research**

**SHBT 300. Auditory neural coding laboratory - (New Course)**
Catalog Number: 29629
*Bertrand Delgutte (Medical School) 6509*
Research projects on the neural coding of sound and the neural basis of auditory perception, with emphasis on the mechanisms for listening in adverse environments comprising reverberation and competing sound sources.

**SHBT 301. Investigates the acoustics and mechanics of the middle ear, with a dual emphasis on comparative physiology of the ear and clinical issues in middle-ear disease and its treatment - (New Course)**
Catalog Number: 54684
*John J. Rosowski (Medical School) 6498*

**SHBT 302. The mechanics and physiology of the peripheral auditory system, with an emphasis on mechanisms of cochlear amplification, nonlinearity, and otoacoustic emissions. - (New Course)**
Catalog Number: 55476
*Christopher A. Shera (Medical School) 6499*

**SHBT 303. Sensory coding, and feedback control, in the mammalian cochlea; mechanisms of sensorineural hearing loss. - (New Course)**
Catalog Number: 42465
*M. Charles Liberman (Medical School) 3945*

**SHBT 305. TBA - (New Course)**
Catalog Number: 17641
*Konstantina Stankovic (Medical School) 6500*

**SHBT 306. Clinical studies of laryngeal voice disorders with an emphasis on the development of improved diagnostic and treatment methods including the application of**
acoustic, aerodynamic, mechanical and imaging technologies. - (New Course)
Catalog Number: 16069
Robert E. Hillman (Medical School) 6508

*SHBT 310. Independent Study in Speech and Hearing Sciences - (New Course)
Catalog Number: 76933
John J. Rosowski (Medical School) and Bertrand Delgutte (Medical School)
Half course (fall term; repeated spring term). .
Opportunity for independent study of topics in speech and hearing sciences under regular supervision by an SHBT faculty member.
Note: For SHBT students only

*SHBT 333r. Laboratory Rotation in Speech and Hearing Sciences - (New Course)
Catalog Number: 41383
Bertrand Delgutte (Medical School) 6509
Research on topics in theoretical, experimental, clinical, or translational aspects of Speech and Hearing Sciences arranged on an individual basis with a research supervisor.
Note: For SHBT students only

Quarter Courses for Graduate Students Only

*SHBT 301qc. Speech and Hearing Laboratory Visits - (New Course)
Catalog Number: 14124
Bertrand Delgutte (Medical School) 6509
Research on topics in theoretical, experimental, clinical, or translational aspects of Speech and Hearing Sciences arranged on an individual basis with a research supervisor.
Note: More details can be found by going to the Division of Medical Sciences website, then clicking Current Students and selecting Quarter Courses.

Virology

Primarily for Graduates

*Virology 200. Introduction to Virology
Catalog Number: 6075 Enrollment: Limited to 20.
Max L. Nibert (Medical School), Michaela Gack (Medical School), Elliott D. Kieff (Medical School), David M. Knipe (Medical School), Karl Münger (Medical School), and Priscilla Yang (Medical School)
Introduction to virology. The lecture component reviews the basic principles of virology and introduces the major groups of human viruses. Weekly discussion groups critically analyze selected papers from the literature.
Note: There will be a final project consisting of a proposal based on laboratory rotations (for Virology, BBS, or Immunology Program students) or a final paper based on a topic from the literature. Offered jointly with the Medical School as MG 705.0.
Virology 201. Virology
Catalog Number: 1190
Sean P.J. Whelan (Medical School), James M. Cunningham (Medical School), and David T. Evans (Medical School)
Literature based reading. Proposal writing. Course covers a broad range of topics: viral genetics, structure/replication, pathogenesis, evolution ("emerging viruses"), chronic infection, latency, innate and adaptive immunity, anti-viral drugs and vaccine strategies.
Note: Offered jointly with the Medical School as MG 723.0.
Prerequisite: Graduate standing and permission required.

Catalog Number: 6025
David T. Evans (Medical School), Michaela Gack (Medical School), Samuel D. Rabkin (Medical School), and Frederick C. Wang (Medical School)
Half course (fall term). W., 1:30–4:30.
Students will write, present, and evaluate research proposals in the areas of virus replication, viral pathogenesis and treatment and prevention of viral infections.
Note: Offered jointly with the Medical School as MG 724.0.
Prerequisite: General background in biochemistry and virology.

Graduate Courses of Reading and Research

*Virology 300r. Introduction to Research
Catalog Number: 0530
David M. Knipe (Medical School) 7089

*Virology 301. Herpes Virus Interaction with the Host Cell
Catalog Number: 7344
David M. Knipe (Medical School) 7089

*Virology 303. AIDS Pathogenesis Research in the Nonhuman Primate Model of SIV Infection with a Focus on Host Immune Responses in Natural Hosts of SIV, AIDS Vaccine Development, and Immunopathogenesis of CMV Infection
Catalog Number: 6772
Amitinder Kaur (Medical School) 6692

*Virology 304. Molecular Biology of Kaposi’s Sarcoma-Associated Herpes Virus
Catalog Number: 8182
Kenneth M. Kaye (Medical School) 3064

*Virology 305. Entry and Replication of Negative-Strand RNA Viruses
Catalog Number: 5437
Sean P.J. Whelan (Medical School) 4591
*Virology 306. Structure and Function of Herpes virus DNA Polymerase and the HIV
Reverse Transcriptase; Resistance to Antiviral Drugs in Clinical Viral Isolates and
Mechanisms of Resistance and Pathogenesis
Catalog Number: 6968
Clyde S. Crumpacker II (Medical School) 1092

*Virology 307. Genetics and Biochemistry of Prokaryotic Transposable Elements and
Yeast Meiotic Chromosome Metabolism
Catalog Number: 6097
Nancy Kleckner 4697

*Virology 308. Molecular Genetics of Herpes Virus
Catalog Number: 3000
Donald M. Coen (Medical School) 7617

*Virology 309. Immunology of Pregnancy, Tolerance and Multiple Sclerosis
Catalog Number: 4011
Jack L. Strominger 1193

*Virology 310. Cellular Transformation by SV40
Catalog Number: 0221
James A. DeCaprio (Medical School) 1296

*Virology 311. Molecular Biology of Epstein-Barr Infection
Catalog Number: 0513
Frederick C. Wang (Medical School) 1297

*Virology 312. Molecular Biology of Epstein Barr Virus infection and Transformation of B
Lymphocytes
Catalog Number: 3483
Elliott D. Kieff (Medical School) 1858

*Virology 313. Molecular Basis for Simian Virus Pathogenesis
Catalog Number: 2528
Ronald C. Desrosiers (Medical School) 1874

*Virology 314 (formerly *Pathology 323). Viral Oncoproteins as Probes to Study the
Regulation of Cell Growth and Differentiation
Catalog Number: 6286
Karl Münger (Medical School) 1586

*Virology 315. Mechanisms of Transcriptional Repression in Eukaryotic Cells
Catalog Number: 0462
Yang Shi (Medical School) 3169
*Virology 317. Virology and Immunology of Human Retroviruses
Catalog Number: 0954
Myron Essex (Public Health) 2499

*Virology 318. Persistence and Pathogenesis of Hepatitis C Virus Infection
Catalog Number: 9144
Raymond Taeyong Chung (Medical School) 6178

*Virology 319. Functional Analysis of Tumor Suppression Genes
Catalog Number: 5817
David Morse Livingston (Medical School) 4872

*Virology 320. Pathogenesis of Human Retroviruses
Catalog Number: 1532
Joseph G. Sodroski (Public Health) 1712

*Virology 321. Retroviral DNA Integration
Catalog Number: 6857
Alan N. Engelman (Medical School) 2196

*Virology 322. HIV Molecular Biology and Pathogenesis
Catalog Number: 9023
Dana Gabuzda (Medical School) 1581

*Virology 324. Leukemogenic Retroviruses
Catalog Number: 5263
James M. Cunningham (Medical School) 2346

*Virology 325. Retroviral Pathogenesis; AIDS Vaccine Development, and the Nature of Protective Immunity
Catalog Number: 8029
Ruth M. Ruprecht (Medical School) 2716

*Virology 326. Pathogenesis and Treatment of Human Retrovirus and Herpesvirus Infection
Catalog Number: 6440
Martin S. Hirsch (Medical School) 2876

*Virology 327. Epstein-Barr virus nuclear proteins in lymphomagensis and the viral lifecycle
Catalog Number: 8083
Eric Christian Johannsen (Medical School) 6264

*Virology 328. Humoral Response to Retroviral Infections in Humans; Identification of Coding Sequence of Human Retroviruses and their Gene Products
Catalog Number: 2513
*Tun-hou Lee (Public Health) 2769

**Virology 329. Immune control of HIV and implications for vaccine development**
Catalog Number: 5417
*Bruce Walker (Medical School) 2847

**Virology 330. Critical Readings in Virology**
Catalog Number: 5966
*David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (seven weeks). Different topics are covered each term.

*Note:* Two seminars, which can be taken in different terms, are required for credit. Non-DMS students must get permission from the Division of Medical Sciences before registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

**Virology 331. Polyomavirus JC, the Etiologic Agent of Progressive Multifocal Eukoencephalopathy (PML)**
Catalog Number: 9476
*Igor J. Koralnik (Medical School) 6179

**Virology 332. Protein Phosphorylation and Gene Expression in Normal and Transformed Cells**
Catalog Number: 9093
*Raymond L. Erikson 7506

**Virology 333. Antiretroviral Drug Resistance, and Drug Resistant Human Immunodeficiency Virus**
Catalog Number: 5526
*Daniel R. Kuritzkes (Medical School) 4773

**Virology 334. HIV-1 and Other Viruses**
Catalog Number: 3803
*Michael R. Farzan (Medical School) 4775
Half course (fall term).

**Virology 336. Genetic Changes in HIV and Hepatitis C Virus**
Catalog Number: 8685
*Todd Allen (Medical School) 6180

**Virology 337. Humoral and Innate Immune Responses During Viral Infections Focusing on HIV-1 Infection**
Catalog Number: 0111
*Xinzhen Yang (Medical School) 6182
*Virology 338. Metabolism and Survival Pathways of Epstein-Barr Virus Transformed Cells
Catalog Number: 7495
Ellen D. Cahir-McFarland (Medical School) 6268

*Virology 339. Mechanisms of HIV protein degradation, epitope processing and presentation to virus-specific CD8 T cells
Catalog Number: 3999
Sylvie Le Gall (Medical School) 6269

*Virology 347 (formerly *Microbiology 342). Reovirus Structure, Assembly, and Particle Functions in Entry and RNA Synthesis
Catalog Number: 4181
Max L. Nibert (Medical School) 3896

*Virology 348. Immunopathogenesis of HIV-1 and the Development of HIV-1 Vaccine Strategies
Catalog Number: 8409
Dan Hung Barouch (Medical School) 5744

*Virology 349. Imaging Techniques to Study the Behavior of Individual Biological Molecules and Complexes in Vitro and in Live Cells
Catalog Number: 33202
Xiaowei Zhuang 3991

*Virology 350. Regulation of Host Innate Immunity Against Viral Infection
Catalog Number: 50408
Michaela Gack (Medical School) 6959

*Virology 351. molecular mechanisms of HIV (human immunodeficiency virus) viral entry - (New Course)
Catalog Number: 29818
Bing Chen (Medical School) 7013

*Virology 352. Biology and evolution of human adenoviruses. - (New Course)
Catalog Number: 52819
James Chodosh (Medical School) 7017

Quarter Courses for Graduate Students Only

*Virology 300qc. Advanced Topics in Virology
Catalog Number: 78093
David Lopes Cardozo (Medical School) 5995
A series of reading and discussion seminars, each running for a half term (7 weeks).
Note: Non-DMS students must get permission from the Division of Medical Sciences before
registering for this course. Please contact us at 617-432-0162 or visit the DMS Office at T-MEC 435, 260 Longwood Avenue, Boston.

*Virology 301qc. Advanced Topics in Virology*
Catalog Number: 33563  
*Alan N. Engelman (Medical School)* 2196  
*Quarter course (spring term).*  
Critical evaluation of virology-related papers reporting a seminal contribution, strong methodological approaches or, in some cases, due to errors in methodology or author interpretation. Requirements include written critiques and class participation. January course.  
*Note:* More details can be found by going to the [Division of Medical Sciences website](http://medicalsciences.harvard.edu), then clicking Current Students and selecting Quarter Courses.

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**Medieval Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

*Faculty of the Committee on Medieval Studies*

Daniel L. Smail, Professor of History (*Chair*)  
Luis M. Girón Negrón, Professor of Romance Languages and Literatures and of Comparative Literature (*Acting Chair, fall term*)  
M. Shahab Ahmed, Associate Professor of Islamic Studies (*spring term only*)  
Dimiter Georgiev Angelov, Visiting Associate Professor of History  
Charles Donahue, Jr., Paul A. Freund Professor of Law (*Law School*)  
Daniel G. Donoghue, John P. Marquand Professor of English  
Michael S. Flier, Oleksandr Potebnja Professor of Ukrainian Philology  
Virginie Greene, Professor of Romance Languages and Literatures, Harvard College Professor  
Jeffrey F. Hamburger, Kuno Francke Professor of German Art and Culture  
Amy Hollywood, Elizabeth H. Monrad Professor of Christian Studies (*Divinity School*)  
Simon R. Innes, Assistant Professor of Celtic Languages and Literatures  
Baber Johansen, Professor of Islamic Religious Studies (*Divinity School*)  
Ioli Kalavrezou, Dumbarton Oaks Professor of Byzantine Art  
Thomas Forrest Kelly, Morton B. Knafel Professor of Music (*on leave spring term*)  
Beverly M. Kienzle, John H. Morison Professor of the Practice of Latin and Romance Languages, Lecturer on Medieval Christianity, Director of Language Studies (*Divinity School*)  
Michael McCormick, Francis Goellet Professor of Medieval History  
Catherine McKenna, Margaret Brooks Robinson Professor of Celtic Languages and Literatures (*fall term only*) (*on leave spring term*)
Stephen A. Mitchell, Professor of Scandinavian and Folklore (on leave spring term)
Tomás Ó Cathasaigh, Henry L. Shattuck Professor of Irish Studies (spring term only) (on leave fall term)
Ahmed Ragab, Richard T. Watson Assistant Professor of Science and Religion (Divinity School)
Panagiotis Roilos, George Seferis Professor of Modern Greek Studies and of Comparative Literature
James Simpson, Donald P. and Katherine B. Loker Professor of English, Harvard College Professor
Christine Smith, Robert C. and Marian K. Weinberg Professor of Architectural History (Design School)
Charles Stang, Associate Professor of Early Christian Thought (Divinity School)
Hugo van der Velden, Professor of History of Art and Architecture
Jan Ziolkowski, Arthur Kingsley Porter Professor of Medieval Latin

Other Faculty Offering Instruction in Medieval Studies

Evrildiki Georganteli, Visiting Lecturer on History of Art and Architecture and Medieval Studies
Nicholas Watson, Professor of English (on leave 2012-13)

The Standing Committee on Medieval Studies exists in order to promote and coordinate teaching and scholarship on medieval Europe and the Near East throughout the University, including Dumbarton Oaks in Washington, D.C. As a program committee within the Faculty of Arts and Sciences, it mounts a number of undergraduate and graduate courses each year, and coordinates a Secondary Field in Medieval Studies for PhD students and a Secondary Field in Medieval Studies for undergraduates. Although Harvard offers no PhD specifically in Medieval Studies, the committee has the authority to administer interdisciplinary PhDs in liaison with a regular departmental program. Working in cooperation with the GSAS Graduate Student Workshop, it also sponsors events and activities of interest to medievalists. Among these are the frequent meetings of the Medieval Studies Seminar on Monday afternoons, an occasional series of Special Seminars and conferences in Medieval Studies, the yearly reception for medievalists throughout the Boston area, and a graduate student Workshop in Medieval Studies. The committee has the further responsibility of fostering the Medieval Studies Library in Widener D. Its electronic mailing list and website are the most comprehensive guide to late antique, medieval, and Byzantine events at Harvard University and in the Boston area generally.

Specific questions concerning Medieval Studies on either the undergraduate or the graduate level and requests for the annual list of courses on medieval topics should be addressed to the Chairman of the Committee, Nicholas Watson.

For more information and to receive the Medieval Studies Committee email on its frequent activities, contact medieval@fas.harvard.edu (and view its website at http://medieval.fas.harvard.edu/icb/icb.do ).

For Undergraduates and Graduates
Medieval Studies 107. Authority and Invention: Medieval Art and Architecture
Catalog Number: 9420
Christine Smith (Design School)
Half course (fall term). M., W., at 12, and an additional section to be arranged. EXAM GROUP: 5
Masterworks of art and architecture in Western Europe from the decline of Rome to the dawn of the Italian Renaissance. Explores the creative tension between the impulse to originality and the authority of classical models in the search for new art forms. Emphasis on representative works considered in their totality (architecture, painting, sculpture, and minor arts) as experiential wholes; and on the plurality of geographical and cultural contexts (Italy, Germany, France, and Spain).
Note: Offered jointly with the Graduate School of Design as 4358. Meets at the Graduate School of Design, Gund Hall. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

Catalog Number: 5468
Charles Donahue, Jr. (Law School)
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4
A survey of the ideas and events that shaped the structure of English law and governance from the Anglo-Saxon invasions to the Reformation Parliament. Topics include the formation of the kingdom of England, the emergence of institutions of royal governance, the relations between church and state, the development of Parliament, and the various institutional reactions to political conflict and social change.
Note: Expected to be given in 2013–14. Offered concurrently, but with a separate section, at the Law School as Law 42200A-1.

Medieval Studies 119. Constitutional and Legal History of Medieval Continental Europe
Catalog Number: 4410
Charles Donahue, Jr. (Law School)
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4
A survey of the main outlines of continental European constitutional and legal history from the fall of the Roman Empire to the “Rise of absolutism” at the beginning of the 17th century. Focuses on the main expressions of European legal culture over this long period of time. In each period an effort is made to relate the types of law produced to the social, political, and religious history of the period.
Note: Offered concurrently, but with a separate section, at the Law School as Law 42100A-1.

Primarily for Graduates

[Medieval Studies 201 (formerly Medieval Studies 101). The Auxiliary Disciplines of Medieval History: Proseminar]
Catalog Number: 3759
Michael McCormick
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
Familiarizes scholars in all areas of medieval studies with the research tools and techniques for advanced study of late antique and medieval evidence: Latin palaeography, codicology, hagiography, late Latin philology, late antique studies, numismatics, diplomatic.
Note: Expected to be given in 2013–14.

*Medieval Studies 202. Latin Palaeography and Manuscript Culture: Seminar
Catalog Number: 7124 Enrollment: Limited to 12.
Beverly M. Kienzle (Divinity School)
Half course (fall term). Th., 2–5. EXAM GROUP: 16, 17, 18
An introduction to Latin manuscripts and the historical and cultural context of their production and use. Taught in collaboration with William Stoneman, Librarian, Houghton Library. This course includes a practical initiation to Latin paleography, with visits to Houghton and opportunities to work with both actual manuscripts and facsimiles of famous manuscripts, practice in transcribing previously unedited texts, and discussion of problems in textual criticism. Student presentations on research projects. All classes will be held in Houghton Library.
Note: Offered jointly with the Divinity School as 2223.
Prerequisite: Completion of an intermediate Latin course or the equivalent.

Medieval Studies 223. Preaching and the Sermon in the Middle Ages
Catalog Number: 8726 Enrollment: Limited to 12.
Beverly M. Kienzle (Divinity School)
Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8
A literary and historical survey of preaching and the sermon from the early to the late Middle Ages, as practiced by bishops, monks, friars, religious women, lay people, and dissident Christians. Readings from sermons and other primary sources, current research on the history of preaching, and methodological issues. Focus on sermon and sermon-related manuscripts in the Houghton Library collection.
Note: Offered jointly with the Divinity School as 2226.
Prerequisite: Completion of an intermediate Latin course or the equivalent.

Catalog Number: 7365 Enrollment: Limited to 12.
Beverly M. Kienzle (Divinity School)
Half course (spring term). Hours to be arranged.
Reading and analysis of Hildegard of Bingen’s Expositiones evangeliorum with attention to genre, exegetical and homiletic tradition, intertextuality, and questions of gender and authority. Requirements include: secondary readings on Hildegard’s works, medieval exegesis, monastic culture, medieval religious women; a research project based on the homilies’ sources.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2224.
Prerequisite: Completion of an intermediate Latin course or the equivalent.

*Medieval Studies 250. At Cross Purposes: The Crusades in Material Culture - (New Course)
Catalog Number: 84714 Enrollment: Limited to 15.
Evridiki Georganeteli
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
Crusading expeditions in the Holy Land, Spain and Eastern Europe from 1096 until the end of the Middle Ages shaped the political, socio-economic and cultural map of Europe and the Middle East. This course explores the multifaceted encounters between crusaders, Byzantines, Jews, Armenians and Muslims through the material traces they left behind: architecture, Byzantine objects dispersed across Western Europe, coins, sculptures, frescoes, and manuscripts from the East and the West.

**Graduate Course**

*Medieval Studies 300hf (formerly Medieval Studies 300). Medieval Studies Interdisciplinary Workshop*
Catalog Number: 5321
Luis M. Girón Negron 3060, Daniel L. Smail 5343, and Nicholas Watson 3851 (on leave 2012-13)
Half course (throughout the year). Hours to be arranged.
Focuses on dissertations in progress and other research topics of mutual concern.
*Note:* Enrollment is open to all graduate students.

**Cross-listed Courses**

For courses of additional interest, please see courses taught by members of the Committee at the Graduate School of Design, Harvard Divinity School, and Harvard Law School.

**Core Curriculum**

*Celtic Languages and Literature*

[Celtic 101. The Hero of Irish Myth and Saga]
[Celtic 109. The Finn Cycle]
[Celtic 114. Early Irish Historical Tales]
[Celtic 118. The Gaelic World: 12th Century to 17th Century]
[Celtic 137. Celtic Mythology]
[Celtic 138. Mabinogion: Narrative Traditions of Medieval Wales]
[Celtic 151. The Literature of Medieval Celtic Christianity: The Hagiographical Tradition]
[Celtic 164. Medieval and Early Modern Gaelic Society: Landscape, Settlement and Material Culture - (New Course)]
[Celtic 184. The Táin]
[Celtic 194. Celtic Bards and Their Poems]
[Irish 200. Introduction to Old Irish]
[Irish 201r. Continuing Old Irish]
[Irish 204r. Readings in Early Irish Poetry]
[Irish 205r. Readings in Early Irish Prose]
[Welsh 225a. Medieval Welsh Language and Literature]
[Welsh 225b. Medieval Welsh Poetry]
[Welsh 226r. Readings in Middle Welsh Prose]
[Welsh 227. Seminar: Welsh Bardic Poetry]

The Classics

Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe -
(New Course)
Latin Bam (formerly Latin 3m). Latin Prose Selections (Late Antique and Medieval)
Latin Bbm (formerly Latin 4m). Introduction to Latin Poetry (Late Antique and Medieval)
Medieval Greek 115ar. Introduction to Byzantine Greek
Modern Greek 220. Greek Imaginaries - (New Course)

Comparative Literature

[*Comparative Literature 211. Mysticism and Literature: Seminar]*
[Comparative Literature 251. Literary Criticism and Theory: Antiquity to the Renaissance]
Comparative Literature 252. The Literatures of Medieval Iberia: Approaches and Debates in their Comparative Study
[Literature 157 (formerly Comparative Literature 111). From Type to Self in the Middle Ages]
Literature 163. Jewish Languages and Literature

English

*English 300hf. Old and Middle English: Doctoral Conference

Folklore and Mythology

*Folklore and Mythology 98a. History and Theory of Folklore and Mythology*
*Folklore and Mythology 167. Charms, Rituals and Speech Acts: Theories of Magic in Performance - (New Course)*

Freshman Seminars

General Education

Aesthetic and Interpretive Understanding 16. Openings: The Illuminated Manuscript
[Aesthetic and Interpretive Understanding 42. Literature and Revolution: Great Books in Moments of Cultural Transformation]
[Aesthetic and Interpretive Understanding 49 (formerly Medieval Studies 114). The Medieval Imagination: Visions, Dreams, and Prophecies]
Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West
Culture and Belief 27 (formerly Jewish Studies 55). Among the Nations: Jewish History in Pagan, Christian and Muslim Context
Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the
Culture of Medieval Rus'
[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]
Culture and Belief 51. Making the Middle Ages - (New Course)
[Societies of the World 41 (formerly History 1050). Medieval Europe]

Germanic Languages and Literatures

[Scandinavian 150. The Vikings and the Nordic Heroic Tradition]
[Scandinavian 160a. Old Norse Language, Literature, and Culture: The Viking Legacy]
[Scandinavian 160br. Old Norse Language, Literature, and Culture: Mythology]

Government

Government 1060. Ancient and Medieval Political Philosophy

History

[*History 71b. The European Renaissance and Reformation, 1350-1650]
[History 80e. From Gaul to France: The History, Archaeology and Science of the Fall of the Roman Empire]
*History 81f. Women’s Voices in Medieval and Early Modern Europe
[History 1040. The Fall of the Roman Empire]
[History 1041 (formerly Historical Study B-13). Charlemagne and the Birth of Medieval Civilization]
[History 1060. Europe and Its Borders, 950-1550]
History 1144 (formerly Historical Study B-19). The Renaissance in Florence
[History 1301. Western Intellectual History II: The Prehistory of Modern Thought]
History 1877a (formerly History 1877). History of the Near East, 600-1055
[History 1877b (formerly *History 78b). History of the Near East, 1055-1500: Conference Course]
[History 1878a. Ottoman State and Society I (1300–1550)]
History 1940. Science and the Global Human Past: Case Studies at the Cutting Edge: Conference Course - (New Course)
*History 2050. Medieval Societies and Cultures: Proseminar
[History 2055hf (formerly History 2055). Early Medieval History: Communications in the Early Medieval Mediterranean: Seminar]
[History 2060. Topics in Medieval and Early Global History: Seminar]
History 2080. Medieval Law
*History 2112. Latin Texts of the Italian Renaissance: Proseminar
[History 2884. Topics in Ottoman Social and Cultural History: Seminar]
[History 2885. Introduction to Archival Research in Ottoman History: Proseminar]
[History 2886. Topics in Islamic History: Seminar]
*History 3010. Reading and Research

History and Literature
*History and Literature 97. Tutorial — Sophomore Year

History of Art and Architecture

[History of Art and Architecture 120n. Art of the Timurids in Greater Iran and Central Asia]
[History of Art and Architecture 141k. Rome, Constantinople, Ravenna in the Light of Imperial Rule: Proseminar]
[History of Art and Architecture 143r (formerly *History of Art and Architecture 143m). The Art of the Court of Constantinople: Proseminar]
History of Art and Architecture 145p. Court and Cloister in the Late Middle Ages - (New Course)
History of Art and Architecture 152m. Leonardo da Vinci
*History of Art and Architecture 229p. Word and Image in Persian Painting: Seminar
*History of Art and Architecture 240r. Topics in Byzantine Art: Illustrating the Word: manuscripts and their images from the Byzantine religious and secular world
[*History of Art and Architecture 242. Openings: Issues of Interpretation in Medieval Art: Seminar]
[History of Art and Architecture 245x. Jan van Eyck’s Renaissance: Seminar]

History of Science

History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
[History of Science 112. Health, Medicine and Healing in Medieval and Renaissance Europe]
History of Science 113. Crusades, Plagues and Hospitals: Medicine and Society in the Islamic Middle Ages
History of Science 209. Science, Religion and Culture: Debates, Methods and Controversies
[History of Science 215r. Science and Culture in Medieval and Early Modern Europe: Seminar]

Linguistics

Linguistics 168. Introduction to Germanic Linguistics
[ Linguistics 247. Topics in Germanic Linguistics]
Linguistics 250. Old Church Slavonic
[ Linguistics 251. Advanced Readings in Church Slavonic Texts ]
[ Linguistics 252. Comparative Slavic Linguistics]

Music

Music 1a. Introduction to Western Music from the Middle Ages to Mozart
Music 191r. Topics in Medieval and Renaissance Music: Proseminar
Music 212r. Chant: Seminar
[Music 213r. Topics in Medieval Polyphony]
[Music 214r. Renaissance Music: ]
Near Eastern Languages and Civilizations

Arabic Ba (formerly Arabic 120a and 121a). Intermediate Arabic I
Arabic 150r. History of Classical Arabic Literature: Seminar
Arabic 160r. Readings in Arabic Historians, Geographers, and Biographers
Arabic 240a. Classical Arabic Philology
[Arabic 246r. Andalus, Sicily, and the Maghrib in Literary and Cultural Texts: Seminar]
[Arabic 249r. Arabic Philosophical Texts: Seminar]
Arabic 250r. Islamic Theological Texts
[Armenian 120. Armenian Magical Texts]
[Hebrew 217. The Medieval Torah Commentary: A Practical Introduction: Seminar]

The Study of Religion

Religion 1402. Early Christian Thought 2: The Latin Tradition
Religion 1434. History of Western Christianity, 150-1100
[Religion 1437. History of Western Christianity: 1100–1500]

Romance Languages and Literatures

French 70a. Introduction to French Literature I: From the Middle Ages to Modernity
French 102. Introduction to Medieval Literature and Old French
French 213. In Search of a Medieval Subject
[Romance Studies 79. Romance Languages and Cultures in Comparative Perspective]
Spanish 70a. Heroes, Rogues, and Significant Others: Voices from Medieval and Early Modern Spain
[Spanish 110. Hispanic Literature: The Middle Ages]
Spanish 201. Historia de la lengua española

Slavic Languages and Literatures

Slavic 201. Introduction to East Slavic Languages
[Slavic 280r. Slavic Culture: Seminar]

Middle Eastern Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Middle Eastern Studies
Baber Johansen, Professor of Islamic Religious Studies (Divinity School) (Chair)
Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures
Steven C. Caton, Khalid Bin Abdullah Bin Abdulrahman Al Saud Professor of Contemporary Arab Studies
Khaled El-Rouayheb, Gardner Cowles Associate Professor of Islamic Intellectual History
Luis M. Girón Negrón, Professor of Romance Languages and Literatures and of Comparative Literature
William Albert Graham, Murray A. Albertson Professor of Middle Eastern Studies and University Distinguished Service Professor (on leave 2012-13)
William E. Granara, Professor of the Practice of Arabic on the Gordon Gray Endowment
Michael Herzfeld, Ernest E. Monrad Professor of the Social Sciences (on leave spring term)
Cemal Kafadar, Vehbi Koc Professor of Turkish Studies (on leave 2012-13)
Mohsen Mostafavi, Alexander and Victoria Wiley Professor of Design and Dean of the Graduate School of Design (Design School)
Roy Mottahedeh, Gurney Professor of History (on leave spring term)
Afsaneh Najmabadi, Francis Lee Higginson Professor of History and Professor of the Studies of Women, Gender, and Sexuality
Gülru Necipoglu-Kafadar, Aga Khan Professor of Islamic Art
David J. Roxburgh, Prince Alwaleed bin Talal Professor of Islamic Art History
A. Hashim Sarkis, Aga Khan Professor of Landscape Architecture and Urbanism in Muslim Societies (Design School)
Malika Zeghal, Prince Alwaleed Bin Talal Professor in Contemporary Islamic Thought and Life

Other Faculty Offering Instruction in Middle Eastern Studies

Susan M. Kahn, Lecturer on Near Eastern Languages and Civilizations

The Center for Middle Eastern Studies was established for the purpose of integrating and reinforcing instruction and research in the languages, literatures, history, economics, and cultures of North Africa, the Middle East, and Islamic Central and South Asia, with the emphasis on the modern period. The Committee on Middle Eastern Studies is the degree committee that administers programs offered through the Center. To achieve its goals, the Center cooperates with departments within the Faculty of Arts and Sciences and with other faculties that have Middle Eastern interests, other regional studies centers, and various libraries and museums that hold collections related to Middle Eastern and Islamic studies. The Center’s aim is to offer a comprehensive program to provide integrated training for those planning careers in education, government service, or private industry, and to support research on the area.

The following degree programs are offered through the Center: Regional Studies Program—Middle East (AM): The program for this degree requires two years of study, leading to an AM. It seeks to give the student both a broad background and a special competence in selected fields of Middle Eastern studies. Each student’s needs and interests, as well as previous experience and qualifications, are taken into account in planning his or her course of study. This program is comparable to other regional studies programs, such as those for Russia and East Asia.

Joint Programs for the PhD: The Faculty of Arts and Sciences has approved joint programs with
other faculty departments for the degree of PhD in Middle Eastern studies and in the fields of anthropology, history, or history of art and architecture. A candidate for a joint PhD degree is usually expected to have completed an AM program in Middle Eastern studies or another relevant field, at Harvard or elsewhere, prior to admission as a doctoral candidate. Joint or concurrent degrees with other departments and faculties are possible on an ad hoc basis.

Languages: Competency in one or more of the languages of the Middle East is critical to advanced studies in this field. The Master’s program requires all students to attain a reading and speaking competence, at least at the intermediate level, in one of the major modern Middle Eastern languages: Arabic, Hebrew, Persian, or Turkish. Students who already have an adequate knowledge of one such language, and native speakers, will be required to study a second language. The PhD programs vary in their language requirements. In most cases, students must attain a thorough knowledge of a modern Middle Eastern language (see above), as well as a reading knowledge of one of the European languages: German, French, Italian, or Russian. In the History and Middle Eastern Studies Program, a written exam will be required in the language of the candidate’s primary research, covering both primary and secondary sources in that language. As in the Master’s program, native speakers of Middle Eastern languages will be required to attain competence in a second Middle Eastern language. (For specific details on language requirements and language proficiency examinations, see the degree supplement Degree Programs in Middle Eastern Studies. Please note that the departments involved in the joint PhD programs, as well as the Committee on Middle Eastern Studies, at times revise their language requirement policies. Students are expected to keep in touch with their advisors and relevant language instructors at all times so they may be informed of possible changes to those requirements.)

Courses: The Center for Middle Eastern Studies publishes a list of Middle Eastern-related courses on its website. Middle Eastern-related courses are offered in the Department of Near Eastern Languages and Civilizations—courses in Akkadian, Ancient Near East, Arabic, Aramaic, Armenian, Armenian Studies, Early Iranian Civilizations, Ethiopic, Hebrew (Classical and Modern), Hebrew Literature and History, Iranian, Islamic Civilizations, Near Eastern Civilizations, Persian, Postbiblical Jewish Studies, Semitic Philology, Sumerian, and Turkish; and the Department of History—courses in Byzantine, Islamic, Judaic, and modern Middle Eastern history. Other appropriate courses are offered in the departments of Anthropology, Classics, Comparative Literature, the Core Curriculum, Fine Arts, Government, Linguistics, Music, Psychology, Sanskrit and Indian Studies, Slavic Languages and Literatures, Sociology, and the Study of Religion. Middle Eastern-related courses are also taught in the graduate schools of Business, Design, Divinity, Law, and Government. For more information about these programs, please refer to the degree supplement, Degree Programs in Middle Eastern Studies.

Middle East Program

*Middle Eastern Studies 299b. Master’s Thesis Reading and Research*

Catalog Number: 33251

Susan M. Kahn and members of the Committee

Half course (fall term; repeated spring term). Hours to be arranged.
Note: Supervised reading, research and writing of master’s thesis. Generally taken by master’s students in the final semester of the AM program in Regional Studies - Middle East.

Mind, Brain, and Behavior

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Mind, Brain, and Behavior

Florian Engert, Professor of Molecular and Cellular Biology (Co-Chair)
Gennaro Chierchia, Haas Foundations Professor of Linguistics (Acting Co-Chair, fall term) (on leave spring term)
Richard W. Wrangham, Ruth Moore Professor of Biological Anthropology (Acting Co-Chair, spring term)
George Angelo Alvarez, John L. Loeb Associate Professor of the Social Sciences
Paola Arlotta, Morris Kahn Associate Professor of Stem Cell and Regenerative Biology
Matthew Boyle, Professor of Philosophy
Alfonso Caramazza, Daniel and Amy Starch Professor of Psychology
Verne S. Caviness, Jr., Giovanni Armenise - Harvard Professor of Neurology (Medical School)
Sandeep Robert Datta, Assistant Professor of Neurobiology (Medical School)
Bradford Clark Dickerson, Associate Professor of Neurology (Medical School)
John E. Dowling, Gordon and Llura Gund Professor of Neurosciences (on leave spring term)
Kurt W. Fischer, Charles Bigelow Professor of Education (Education School)
Alice Weaver Flaherty, Associate Professor of Neurology (Medical School)
Krzysztof Z. Gajos, Assistant Professor of Computer Science
Albert M. Galaburda, Emily Fisher Landau Professor of Neurology (Medical School)
Howard E. Gardner, John H. and Elisabeth A. Hobbs Professor of Cognition and Education (Education School)
Daniel T. Gilbert, Edgar Pierce Professor of Psychology
Paul Gompers, Eugene Holman Professor of Business Administration (Business School)
Joshua D. Greene, John and Ruth Hazel Associate Professor of the Social Sciences
Anne Harrington, Professor of the History of Science
Katherine J. Hinde, Assistant Professor of Human Evolutionary Biology
Hopi E. Hoekstra, Professor of Organismic and Evolutionary Biology and Molecular and Cellular Biology, and Curator of Mammals in the Museum of Comparative Zoology (on leave fall term)
Christine Hooker, Associate Professor of Psychology (on leave 2012-13)
Edward A. Kravitz, George Packer Berry Professor of Neurobiology (Medical School)
Gabriel Kreiman, Assistant Professor of Neurology (Medical School)
David I. Laibson, Robert I. Goldman Professor of Economics, Harvard College Professor
Douglas Lavin, John L. Loeb Associate Professor of the Humanities
Jeff W. Lichtman, Jeremy R. Knowles Professor of Molecular and Cellular Biology (on leave spring term)
Margaret S. Livingstone, Professor of Neurobiology (Medical School)
Jeffrey D. Macklis, Professor of Stem Cell and Regenerative Biology and Professor of Surgery and Neurology, Harvard Medical School
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
Richard J. McNally, Professor of Psychology
Jason P. Mitchell, Professor of Psychology (on leave 2012-13)
Sendhil Mullainathan, Professor of Economics
Charles A. Nelson, Professor in the Department of Society, Human, Development and Health (Public Health)
Bence P. Olveczky, John L. Loeb Associate Professor of the Natural Sciences
Naomi E. Pierce, Sidney A. and John H. Hessel Professor of Biology and Curator of Lepidoptera (on leave fall term)
Steven Pinker, Johnstone Family Professor of Psychology, Harvard College Professor
Maria Polinsky, Professor of Linguistics
Stephen P. Rosen, Beton Michael Kaneb Professor of National Security and Military Affairs (on leave fall term)
Aravinthan D. T. Samuel, Professor of Physics
Joshua R. Sanes, Jeff C. Tarr Professor of Molecular and Cellular Biology (on leave spring term)
Stuart M. Shieber, James O. Welch, Jr. and Virginia B. Welch Professor of Computer Science
Alison Simmons, Samuel H. Wolcott Professor of Philosophy, Harvard College Professor (on leave 2012-13)
Maurice A. Smith, Associate Professor of Bioengineering
Jesse Snedeker, Professor of Psychology
Elizabeth S. Spelke, Marshall L. Berkman Professor of Psychology
Robert A. Stickgold, Associate Professor of Psychiatry (Medical School)
Tomasz Strzalecki, Assistant Professor of Economics (on leave 2012-13)
Naoshige Uchida, Associate Professor of Molecular and Cellular Biology
Leslie G. Valiant, T. Jefferson Coolidge Professor of Computer Science and Applied Mathematics (on leave 2012-13)
Felix Warneken, Assistant Professor of Psychology
Yun Zhang, Associate Professor of Organismic and Evolutionary Biology

Other Faculty Offering Instruction in Mind, Brain, and Behavior

Peter Anthony Cariani, Clinical Instructor in Otology and Laryngology (Medical School)
Gene M. Heyman, Lecturer on Psychology in the Department of Psychiatry (Medical School)
Irene Pepperberg
Erin Wamsley, Instructor in Psychiatry (Medical School)

The Committee on Mind, Brain, and Behavior is an interdisciplinary group of scholars appointed to coordinate the teaching of neuroscience and related fields among Harvard’s departments.
Working closely with the University’s Mind/Brain/Behavior Interfaculty Initiative, the Committee is designed to advance knowledge of neuroscience at multiple levels of analysis ranging from the molecular events within individual neurons to the behavior of organisms (including humans) in a wider environmental and social context. The Committee coordinates the wide and varied course offerings that address methods, findings, and theory in neuroscience; helps students learn of opportunities within the various fields allied with neuroscience; and promotes interdisciplinary interaction among members of these fields.

For undergraduate students wishing to specialize in an area related to the neurosciences, specialized tracks are currently available in seven concentrations: Computer Science, History and Science, Human Evolutionary Biology, Linguistics, Neurobiology, Philosophy, and Psychology. MBB also offers a secondary field. For specific track and secondary field requirements, consult http://mbb.harvard.edu.

Foundation courses are required or recommended in all tracks so that all MBB students can interact. The foundation courses include Science of Living Systems 20, Psychological Science; MCB 80, Neurobiology of Behavior; and one of several designated interdisciplinary seminars listed below. The track program, which results in a Certificate in Mind/Brain/Behavior, also includes a junior symposium and senior thesis workshops.

**Primarily for Undergraduates: Foundation Courses**

Science of Living Systems 20. Psychological Science  
MCB 80. Neurobiology of Behavior

**Primarily for Undergraduates**

*Mind, Brain, and Behavior 90r. Supervised Research: Topics in Mind/Brain/Behavior*  
Catalog Number: 8784  
*Florian Engert and MBB Faculty*  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Supervised individual research leading to a tutorial paper.  
*Note:* Application required; consult MBB website.

**Primarily for Undergraduates: Interdisciplinary Seminars**

Students in the Neurobiology and Psychology Mind/Brain/Behavior tracks must consult with their concentration regarding which seminars will count.  
*Mind, Brain, and Behavior 91z. Music, Mind, and Brain*  
Catalog Number: 91901 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.  
*Peter Anthony Cariani (Medical School)*  
*Half course (spring term). M., 3–5.*  
Survey of neuropsychology of music. Examines psychological and neural substrates of music perception and cognition (pitch and consonance, melody and harmony, timbre, rhythm and meter, Gestaltist grouping processes). Then considers affective psychology (emotion, meaning,
pleasure), music therapy, music and language, and developmental, comparative, and evolutionary perspectives.

[*Mind, Brain, and Behavior 92. A Systems Neuroscience Approach to Conscious Perceptual Experience*]
Catalog Number: 7390 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
*Sean D. Kelly and members of the Committee*
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*
Join renowned neuroscientists from Harvard and elsewhere who will lead highly interactive seminars addressing core problems underlying the emergence of conscious visual experience. Topics include the requisite neuronal representations of the content of visual images, their localization within extrapersonal space and the sense of ownership of such images by a self. Subsidiary topics include selective attention, the binding problem, binocular rivalry, change blindness, recursive neuronal networks and distinction between phenomenal and access consciousness.
*Note:* Expected to be given in 2013–14.

[*Mind, Brain, and Behavior 93. Conscious States: Waking, Sleeping, and Dreaming*]
Catalog Number: 5017 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
*Robert A. Stickgold (Medical School) and Erin Wamsley (Medical School)*
*Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18*
Focuses on waking, sleeping, and dreaming as examples of conscious states in both humans and animals. Original papers and books by Allan Hobson (The Dreaming Brain) and Antonio Damasio (The Feeling of What Happens) form the background for discussions of waking, sleeping, and dreaming from the perspectives of neurology, physiology, psychology, and cognitive neurosciences. Discusses various approaches to understanding the functions of sleep and wake (consciousness) and reviews several theories on the topic.

[*Mind, Brain, and Behavior 94z. The Self: What Philosophy, Psychology, and Neuroscience Tell Us*]
Catalog Number: 96139 Enrollment: Limited to 16. Preference to juniors in MBB tracks or MBB secondary field.
*Florian Engert and members of the Committee*
*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*
Gives a more integrative understanding to sense of self using philosophical theories, neuropsychological quantitative cognitive tests, and neurological conditions involving self disorders. Considers two primary dimensions for sense of self: the diachronic self as based on memory and the synchronic self grounded in the body. Topics include personal identity, mind/brain reduction, first vs. third person perspective, phenomenology of self, introspection, quantitative vs. qualitative methods. Provides appreciation of the advantage of bringing together cross-disciplinary perspectives (neurological, philosophy, and psychology) and research methods (introspection, philosophical intuitions, psychometric tests, behavioral tests, empirical research, and clinical approach).
*Mind, Brain, and Behavior 95. Addiction, Choice, and Motivation*
Catalog Number: 4890 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
Gene M. Heyman (Medical School)
Half course (fall term). Th., 4–6.
Seeks a comprehensive understanding of addiction and why it has been such a contentious topic. Readings and discussion address (1) the characteristics of addiction as revealed in biographies, epidemiological studies, clinical research, and experiments; (2) how drugs work; (3) genetic influences on drug use and behavior, including gene expression; (4) the nature of reward, focusing on food; and (5) a behavioral economic perspective on impulsivity and addiction.

[*Mind, Brain, and Behavior 96. The Science of Happiness]*
Catalog Number: 2517 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
Nancy Lee Etcoff (Medical School)
Half course (spring term). Th., 1–3.
Focuses on the science of happiness, integrating findings from positive psychology, psychiatry, behavioral genetics, neuroscience, and behavioral economics. Begins with a brief history of ideas on happiness from Aristotle to Kahneman. Considers the genetics of happiness including the notion of a biologically determined hedonic set point, the brain’s pleasure circuitry, and the mind’s power to frame events positively, a tool used in cognitive therapies. Questions whether pleasure and happiness are our purpose.
Note: Expected to be given in 2013–14.

Mind, Brain, and Behavior 97a. Avian Cognition: Why Being Called a Bird Brain Is a Compliment
Catalog Number: 46941 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
Irene Pepperberg
Humans have a long, conflicting history judging nonhuman cognitive abilities, particularly for nonprimate species. We anticipate and accept communicative and cognitive capacities resembling our own in great apes and cetaceans, but not in birds. Controlled experimental studies have, however, documented impressive avian cognitive traits. This course explores classic and new findings in avian cognition to demonstrate that birds, despite brain architectures lacking much human-like cortical structure and evolutionary histories differing so greatly from ours, equal and sometimes surpass us on various cognitive tasks.
Note: Not open to students who have taken Psychology 980f.

*Mind, Brain, and Behavior 99z. Creativity Research: Madmen, Geniuses, and Harvard Students*
Catalog Number: 40379 Enrollment: Limited to 15. Preference to juniors in MBB tracks or MBB secondary field.
Florian Engert and members of the Committee
Half course (fall term). Tu., 1–3.
Examines human creativity from three perspectives: a) empirical research sources, b) case
studies of eminent creative achievers, and c) ourselves as creative subjects. Topics include the definition and measurement of creativity, the creative process, the neuroscience of creativity, the creative personality, the role of family life and culture in creativity, the relationship of creativity to IQ, gender differences, and the relationship of creativity to psychopathology.

**Additional Interdisciplinary Seminars**

[Human Evolutionary Biology 1312. Human Sexuality: Research and Presentation Seminar]

*Human Evolutionary Biology 1313. Stress: Research and Presentation Seminar*

Human Evolutionary Biology 1366. Mating Strategies - *(New Course)*

Human Evolutionary Biology 1500. Building Babies: Developmental Trajectories from Conception to Weaning

*Neurobiology 95hfd. Novel Therapeutics in the Central Nervous System*

*Neurobiology 95hfh. Dopamine*

[*Neurobiology 95hfj. The Sleeping Brain *]

*Neurobiology 95hfp. Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab*

*Neurobiology 95hfs. Sensation and Perception: Mapping the Touch, Sight, and Sound of Things*

*Neurobiology 95hfv. The Visual Sense - Illusions and Reality - *(New Course)*

*Neurobiology 95hfw. The Neural Basis of Working Memory - *(New Course)*

*Neurobiology 95hfx. The Neurobiology of Sex and Aggression*

*Psychology 980o. Perception and Imagination*

*Psychology 1357. Puzzles of the Mind: Humans, Animals, Robots: Seminar*

**Courses for Undergraduates and Graduates**

[Culture and Belief 34 (formerly Historical Study A-87). Madness and Medicine: Themes in the History of Psychiatry]*

[Neurobiology 209. Neurobiology of Disease]*


**Additional Courses**

*BCMP 213. Behavioral Pharmacology*

BCMP 230. Principles and Practice of Drug Development

Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis

Biomedical Engineering 130 (formerly Engineering Sciences 149). Neural Control of Movement

Computer Science 181. Intelligent Machines: Perception, Learning, and Uncertainty

[Computer Science 182. Intelligent Machines: Reasoning, Actions, and Plans]*

Computer Science 186. Economics and Computation

Computer Science 187. Computational Linguistics
Computer Science 189r. Autonomous Multi-Robot Systems
Computer Science 228. Computational Learning Theory
Computer Science 229r. Topics in the Theory of Computation
[*Computer Science 266. Biologically-Inspired Distributed and Multi-Agent Systems]*
Computer Science 283. Computer Vision
Computer Science 285. Multi-Agent Systems
Computer Science 287r. Natural Language Processing
Economics 1030. Psychology and Economics
Economics 1032. The Packing Problem: The Behavioral Economics of Scarcity
Economics 1052. Game Theory and Economic Applications
Empirical and Mathematical Reasoning 17 (formerly Quantitative Reasoning 22).
Deductive Logic
Engineering Sciences 53. Quantitative Physiology as a Basis for Bioengineering
[Engineering Sciences 226r. Special Topics in Neural Engineering: Learning and Memory in Neural Systems]
Engineering Sciences 249. Advanced Neural Control of Movement
[History of Science 139. The Postgenomic Moment]
[History of Science 150. History of the Human Sciences]
History of Science 174. Critical Experiments in the Human Sciences
[History of Science 176. Brainwashing and Modern Techniques of Mind Control]
[*History of Science 238. Rethinking the Darwinian Revolution: Seminar]*
[Human Evolutionary Biology 1310. Hormones and Behavior]
Human Evolutionary Biology 1329. Sex, Love and War: The Evolution of Human Behavior - *(New Course)*
[Human Evolutionary Biology 1330. Primate Social Behavior]
Human Evolutionary Biology 1333. Primate Disease Ecology and Global Health
[Human Evolutionary Biology 1335. Behavioral Ecology of Chimpanzees]
[Human Evolutionary Biology 1416. The Neurobiology of Sociality: Seminar]
*Human Evolutionary Biology 1418. Endocrinology and Behavior: Research Seminar*
[Human Evolutionary Biology 1435r. Primate Ecology and Evolution]
[Human Evolutionary Biology 1455. Primate Genetics]
*Human Evolutionary Biology 1463. Molecular Evolution of the Primates*
Human Evolutionary Biology 1490r. Primate Evolution
Human Evolutionary Biology 1495. The Head - *(New Course)*
*Human Evolutionary Biology 2312. Current Topics in Human Evolutionary Genetics*
Human Evolutionary Biology 2430. Behavioral Biology Seminar
[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]
Linguistics 83. Language, Structure, and Cognition
Linguistics 101. The Science of Language: An Introduction
Linguistics 102. Sentence Structure
Linguistics 104. Word Structure
Linguistics 105. Sounds of Language
Linguistics 106. Knowledge of Meaning
Linguistics 112. Syntactic Theory I
Linguistics 115. Phonological Theory I
Linguistics 116r. Semantic Theory I
[Linguistics 130. Psycholinguistics: Seminar]
Linguistics 132. Psychosemantics
Linguistics 146. Syntax and Processing
Linguistics 148. Language Universals
[Linguistics 205r. The Syntax-Semantics Interface]
Linguistics 212r. Syntactic Theory II
Linguistics 216r. Semantic Theory II
Mathematics 153. Mathematical Biology-Evolutionary Dynamics
MCB 105. Systems Neuroscience
MCB 115. Cellular Basis of Neuronal Function
*MCB 129. The Brain: Development, Plasticity and Decline
MCB 131. Computational Neuroscience
*MCB 145. Neurobiology of Perception and Decision Making
*MCB 146. Experience-Based Brain Development: Causes and Consequences
MCB 186. Circadian Biology: From Cellular Oscillators to Sleep Regulation
[MCB 206. Introduction to Connectomics]
Microbiology 213. Social Issues in Biology
[*Neurobiology 95hfu. Building a Brain]
Neurobiology 200. Neurobiology
Neurobiology 204. Neurophysiology of Central Circuits
Neurobiology 207. Developmental Neurobiology
*Neurobiology 220. Cellular Neurophysiology
Neurobiology 221. Molecular Neurobiology
OEB 53. Evolutionary Biology
OEB 57. Animal Behavior
[OEB 105 (formerly OEB 205). Neurobiology of Motor Control]
OEB 145. Genes and Behavior
OEB 223. Topics in Neurogenetics
[Pathology 205. Molecular Biology of the Auditory System]
Philosophy 3. Introduction to the Problems of Philosophy
[Philosophy 8. Introduction to Early Modern Philosophy]
Philosophy 137. The Later Philosophy of Wittgenstein
[Philosophy 144. Logic and Philosophy]
Philosophy 147. Philosophy of Language
Philosophy 156. Philosophy of Mind
*Philosophy 158. Self, Body, and Other: Proseminar - (New Course)
*Philosophy 161. Personal Identity and Self-Consciousness: Proseminar
[Physics 136. Physics of Medical Imaging]
Physics 141. The Physics of Sensory Systems in Biology
Psychology 13. Cognitive Psychology
Psychology 14 (formerly Psychology 1301). Cognitive Neuroscience
Psychology 15. Social Psychology
**Psychology 18. Abnormal Psychology**

*Psychology 950. Psychology Live

**Psychology 1005. Health Psychology**
[Psychology 1006. Psychology of Morality]

[*Psychology 1051. MATLAB: Introduction to Programming for Behavioral Research]*

*Psychology 1052. The application of fMRI in cognitive neuroscience research

**Psychology 1201. Your Brain on Drugs: Psychopharmacology**

*Psychology 1303. The Human Brain Then and Now - *(New Course)*

**Psychology 1304. Brain Damage as a Window into the Mind: Cognitive Neuropsychology**
[Psychology 1307. Brain Genomics]

[*Psychology 1352. Foundations of Cognitive Neuroscience Research]*

[*Psychology 1354. Classic Papers on Memory (and the Ones that Got Away!)]

*Psychology 1358. Is there more to thought than muscle twitches? Cognitive and neural aspects of object and action knowledge

[Psychology 1430. Human Memory and Amnesia]

[*Psychology 1452. The Human Face]*

*Psychology 1502. Cultural Psychology

*Psychology 1503. Psychology of Close Relationships

[*Psychology 1505. Social Cognition: The Psychology of Thinking about Other People]*

*Psychology 1507. Group Decision Making

*Psychology 1512. Changing Minds: Persuasion and Communication

[*Psychology 1551. Mind Perception]*

*Psychology 1556r. Research Seminar in Implicit Social Cognition

**Psychology 1601. Developmental Disabilities**

**Psychology 1604. Social Development**


*Psychology 1651r (formerly *Psychology 1651). Language Development: Undergraduate Laboratory Course: Research Seminar

*Psychology 1652r. Laboratory in Early Cognitive Development

*Psychology 1655r. Conceptual Development: Undergraduate Laboratory Course

**Psychology 1702. The Emotional Mind**

**Psychology 1703. Human Sexuality**

*Psychology 1750 (formerly *Psychology 2751). Free Will, Responsibility, and Law

**Psychology 1801. Anxiety Disorders**
[Psychology 1802. Childhood Trauma]

[*Psychology 1851. Clinical Psychology: Science and Practice]*

[*Psychology 1853. Self-Destructive Behaviors]*

[Psychology 1854. Schizophrenia: Seminar]

*Psychology 1861. Developmental Psychopathology

[*Psychology 2050. History of Psychology: Seminar]*

*Psychology 2060. Reward and Self Control - *(New Course)*

*Psychology 2110. Emotional Development: Biology, Relationships, Culture

[*Psychology 2145. Developmental Cognitive Neuroscience]*

*Psychology 2150r (formerly *Psychology 2150). Social Cognitive Development: Research Seminar
Molecular and Cellular Biology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Molecular and Cellular Biology
Catherine Dulac, Higgins Professor of Molecular and Cellular Biology (Chair)
Howard C. Berg, Herchel Smith Professor of Physics and Professor of Molecular and Cellular Biology (on leave fall term)
Tamara J. Brenner, Lecturer on Molecular and Cellular Biology, Associate Director of Life Sciences Education
Brian Burton, Associate Professor of Molecular and Cellular Biology
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
David Cox, Assistant Professor of Molecular and Cellular Biology and of Computer Science
Victoria M. D’Souza, Associate Professor of Molecular and Cellular Biology
Vladimir Denic, Associate Professor of Molecular and Cellular Biology
John E. Dowling, Gordon and Llura Gund Professor of Neurosciences (on leave spring term)
Ryan Wesley Draft, Lecturer on Molecular and Cellular Biology
Florian Engert, Professor of Molecular and Cellular Biology
Raymond L. Erikson, American Cancer Society Professor of Cellular and Developmental Biology
Nicole J. Francis, Associate Professor of Molecular and Cellular Biology, Visiting Lecturer on Molecular and Cellular Biology
Ethan Garner, Assistant Professor of Molecular and Cellular Biology
Rachelle Gaudet, Professor of Molecular and Cellular Biology (Head Tutor of Molecular and Cellular Biology)
William M. Gelbart, Professor of Molecular and Cellular Biology
Karine A. Gibbs, Assistant Professor of Molecular and Cellular Biology
Guido Guidotti, Higgins Professor of Biochemistry
Takao K. Hensch, Professor of Molecular and Cellular Biology
Hopi E. Hoekstra, Professor of Organismic and Evolutionary Biology and Molecular and Cellular Biology, and Curator of Mammals in the Museum of Comparative Zoology (on leave fall term)
Craig P. Hunter, Professor of Molecular and Cellular Biology
Nancy Kleckner, Herchel Smith Professor of Molecular Biology
Samuel M. Kunes, Professor of Molecular and Cellular Biology
Andres Leschziner, Associate Professor of Molecular and Cellular Biology
Jeff W. Lichtman, Jeremy R. Knowles Professor of Molecular and Cellular Biology (on leave spring term)
Richard M. Losick, Maria Moors Cabot Professor of Biology (on leave 2012-13)
Robert A. Lue, Professor of the Practice of Molecular and Cellular Biology (Director of Life Sciences Education)
Laura M. Magnotti, College Fellow in the Department of Molecular and Cellular Biology
Susan Mango, Professor of Molecular and Cellular Biology (Co-Director of Graduate Studies)
Andrew P. McMahon, Visiting Professor of Stem Cell and Regenerative Biology
Markus Meister, Visiting Professor of Molecular and Cellular Biology
Matthew Meselson, Thomas Dudley Cabot Professor of the Natural Sciences
Lynne Marie Mullen, Preceptor in Molecular and Cellular Biology
Andrew W. Murray, Herchel Smith Professor of Molecular Genetics
Venkatesh N. Murthy, Professor of Molecular and Cellular Biology (on leave fall term)
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of...
Applied Physics and of Molecular and Cellular Biology
David R. Nelson, Arthur K. Solomon Professor of Biophysics and Professor of Physics and
Applied Physics (on leave spring term)
Erin K. O’Shea, Paul C. Mangelsdorf Professor of Molecular and Cellular Biology and of
Chemistry and Chemical Biology (Co-Director of Graduate Studies)
Jill Penn, Preceptor in Molecular and Cellular Biology
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied
Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied
Physics
Casey Jean Roehrig, Preceptor in Molecular and Cellular Biology
Martin A. Samuels, Preceptor in Molecular and Cellular Biology
Joshua R. Sanes, Jeff C. Tarr Professor of Molecular and Cellular Biology (on leave spring term)
Vicki L. Sato, Professor of the Practice of Molecular and Cellular Biology
Alexander F. Schier, Leo Erikson Life Sciences Professor of Molecular and Cellular Biology
Haim I. Sompolinsky, Visiting Professor of Molecular and Cellular Biology (Hebrew University)
Bodo M. Stern, Lecturer on Molecular and Cellular Biology
A. Thomas Torello, Lecturer on Molecular and Cellular Biology
Naoshige Uchida, Associate Professor of Molecular and Cellular Biology
Cheryl Denise Vaughan, Lecturer on Molecular and Cellular Biology
Rosa A. Veguilla, Preceptor in Molecular and Cellular Biology
Alain Viel, Senior Lecturer on Molecular and Cellular Biology
Mary Ellen Wiltrout, Preceptor in Molecular and Cellular Biology

Other Faculty Offering Instruction in Molecular and Cellular Biology

Arkhat Abzhanov, Associate Professor of Organismic and Evolutionary Biology
Emily Patricia Balskus, Assistant Professor of Chemistry and Chemical Biology
Colleen M. Cavanaugh, Edward C. Jeffrey Professor of Biology (on leave 2012-13)
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Charles A. Czeisler, Frank Baldino, Jr., Ph.D. Professor of Sleep Medicine (Medical School)
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of
Physics
Scott V. Edwards, Professor of Organismic and Evolutionary Biology, Alexander Agassiz
Professor of Zoology in the Museum of Comparative Zoology, and Curator of Ornithology
Kevin C. Eggan, Professor of Stem Cell and Regenerative Biology
Cassandra G. Extavour, Associate Professor of Organismic and Evolutionary Biology (on leave
spring term)
Peter R. Girguis, John L. Loeb Associate Professor of the Natural Sciences
David A. Haig, George Putnam Professor of Organismic and Evolutionary Biology, Harvard
College Professor
Marcia C. Haigis, Assistant Professor of Pathology (Medical School)
Daniel L. Hartl, Higgins Professor of Biology
J. Woodland Hastings, Paul C. Mangelsdorf Professor of Natural Sciences, Emeritus
Daniel E. Kahne, Professor of Chemistry and Chemical Biology
Elena M. Kramer, Bussey Professor of Organismic and Evolutionary Biology
Galit Lahav, Assistant Professor of Systems Biology (Medical School)
David R. Liu, Professor of Chemistry and Chemical Biology, Harvard College Professor
Xiaole Shirley Liu, Associate Professor of Biostatistics (Public Health)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
Christopher Marx, Associate Professor of Organismic and Evolutionary Biology
Alexander Meissner, Associate Professor of Stem Cell & Regenerative Biology
Douglas A. Melton, Xander University Professor of Stem Cell and Regenerative Biology, Harvard College Professor
Thomas Michel, Professor of Medicine (Medical School)
Bence P. Olveczky, John L. Loeb Associate Professor of the Natural Sciences
Hongkun Park, Professor of Chemistry and Chemical Biology and of Physics
Johan M. Paulsson, Associate Professor of Systems Biology (Medical School)
Shiv S. Pillai, Associate Professor of Health Sciences and Technology (Medical School)
Anne E. Pringle, Associate Professor of Organismic and Evolutionary Biology
John L. Rinn, Associate Professor of Stem Cell & Regenerative Biology
Pardis Sabeti, Associate Professor of Organismic and Evolutionary Biology
Alan Saghatelian, Associate Professor of Chemistry and Chemical Biology
Stuart L. Schreiber, Morris Loeb Professor of Chemistry
Matthew D. Shair, Professor of Chemistry and Chemical Biology
Eugene I. Shakhnovich, Professor of Chemistry and Chemical Biology
Pamela A. Silver, Elliott T. and Onie H. Adams Professor of Biochemistry and Systems Biology (Medical School)
Gregory L. Verdine, Erving Professor of Chemistry in the Departments of Stem Cell and Regenerative Biology and of Chemistry and Chemical Biology
John Wakeley, Professor of Organismic and Evolutionary Biology
Xiaoliang Sunney Xie, Mallinckrodt Professor of Chemistry and Chemical Biology
Yun Zhang, Associate Professor of Organismic and Evolutionary Biology
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

The Molecular and Cellular Biology (MCB) concentration is primarily concerned with the understanding of biological processes based on the study of molecules and their interactions in the context of cells and tissues. It integrates many different methodologies ranging from chemistry and genetics to computer science and engineering. The concentration focuses on fundamental principles of modern biology at the hub of nearly all life science sub-disciplines.

The concentration requirements establish a solid foundation in basic biology, chemistry, mathematics, and physics, which is followed by more advanced course work designed to expose students to major avenues of inquiry in molecular and cellular biology. Such questions include many of the central issues in biology: How is genetic information transformed into the structure of an organism? How does one cell divide accurately into two? How do individual cells coordinate with their neighbors in the context of a multicellular organism? The concentration is administered by the Department of Molecular and Cellular Biology and the Board of Tutors in Biochemical Sciences, which includes faculty members from other science departments in the Faculty of Arts and Sciences and the Harvard Medical School. For more information about the Molecular and Cellular Biology Concentration, please visit the MCB Life Science Page.
Primarily for Undergraduates

**MCB 52. Molecular Biology**  
Catalog Number: 1938  
_A. Thomas Torello, Nicole J. Francis, and Mary Ellen Wiltrout_  
Half course (fall term). M., W., F., at 10, and one laboratory/discussion session weekly. **EXAM GROUP: 3**  
An integrated and quantitative introduction to the principles of molecular biology with an emphasis on the experimental underpinning of key concepts. This course covers the biochemistry and structure of DNA; the Central Dogma of molecular biology (DNA replication and repair, transcription and RNA processing, and translation); and an overview of gene regulation and systems biology. The weekly section combines an investigative, discovery-based laboratory research project with a discussion emphasizing problem solving and the scientific method. **Note:** This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core area requirement for Science B.  
**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a; or by permission of the instructor; Life Sciences 1b recommended.

**MCB 54. Cell Biology**  
Catalog Number: 0801  
_Robert A. Lue, Vladimir Denic, and Alexander F. Schier_  
Half course (spring term). M., W., F., at 10, and one laboratory/discussion session weekly. **EXAM GROUP: 3**  
An integrated introduction to the structure, function, and interactions of cells. Topics covered include: membrane structure and transport, receptors and channels, protein targeting, cytoskeleton, cell cycle, signal transduction, cell migration, cell growth and death, cell adhesion, cell polarity, embryogenesis, organogenesis, and stem cells. **Note:** Laboratory and discussion sessions focus on problem solving and evaluation of data. A series of linked laboratory exercises provides exposure to several techniques commonly used in cell biology and developmental biology. This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core area requirement for Science B.  
**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b recommended.

**MCB 56. Physical Biochemistry: Understanding Macromolecular Machines**  
Catalog Number: 5424  
_Victoria M. D’Souza, Rachelle Gaudet, and Andres Leschziner_  
Half course (spring term). M., W., F., at 10, and a weekly laboratory/discussion section. **EXAM GROUP: 3**  
The course aims to develop fundamental concepts of biochemistry as they apply to macromolecules, including protein and nucleic acid structure, thermodynamics and kinetics, ligand interactions and chemical equilibria. The course will also emphasize how these concepts are used in studies of the structure and function of biological molecules. In the weekly section, students will undertake a discovery-based laboratory research project in which they will apply these concepts toward understanding the structure and function of the ATPase domain from the ABC transporter associated with antigen processing (TAP).
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; MCB 52; Chemistry 17/27 or Chemistry 20/30 (Chemistry 27 may be concurrent); Math 1b. Physics at the level of PS 2/3 is recommended but not required.

**MCB 80. Neurobiology of Behavior**  
Catalog Number: 6052  
Joshua R. Sanes and Jeff W. Lichtman  
Half course (fall term). Tu., Th., 2:30-4, and a 90-minute section to be arranged. EXAM GROUP: 16, 17  
An introduction to the ways in which the brain controls mental activities. The course covers the cells and signals that process and transmit information, and the ways in which neurons form circuits that change with experience. Topics include the neurobiology of perception, learning, memory, language, emotion, and mental illness.  
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core area requirement for Science B. The course is open to students with little formal training in biology.

**Cross-listed Courses**

- **Life and Physical Sciences A. Foundational Chemistry and Biology**  
- **Life Sciences 1a. An Integrated Introduction to the Life Sciences: Chemistry, Molecular Biology, and Cell Biology**  
- **Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution**  
  [Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]  
- **OEB 50. Genetics and Genomics**  
  [*Visual and Environmental Studies 54s. Animating Science*]

**Molecular and Cellular Biology Supervised Reading and Research Courses**

*MCB 91r. Introduction to Research*  
Catalog Number: 0282  
A. Thomas Torello and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged.  
Laboratory research in topics related to the Molecular and Cellular Biology Concentration under the direction of, or approved by, members of the Board of Tutors.  
*Note:* Limited to Molecular and Cellular Biology concentrators; written permission of both the tutor and laboratory sponsor must be submitted to the MCB Student Affairs Office prior to enrolling in the course. This introductory research course is intended to prepare students for MCB 99 and may ordinarily be repeated no more than once. Ordinarily may not be taken as a fifth course. A final paper must be submitted to the laboratory sponsor and to the MCB Student Affairs Office for review by the instructor and members of the Board of Tutors.

*MCB 99. Laboratory Research for Honors Thesis*  
Catalog Number: 2987  
A. Thomas Torello and members of the Department
Full course (indivisible). Hours to be arranged.
For honors candidates writing a thesis in Molecular and Cellular Biology.
Note: Ordinarily may not be taken as a fifth course. Indivisible for students enrolling in the fall term. Students intending to enroll in the fall are required to submit a written proposal to the instructor. Students may enter the course at midyear only with the permission of the instructor. The thesis proposal must be approved by the instructor and Head Tutor prior to enrolling in MCB 99.

For Undergraduates and Graduates

**MCB 105. Systems Neuroscience**
Catalog Number: 0998
Florian Engert
Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4
The neuronal basis of sensory processing and animal behavior will be explored in many different model systems as diverse as honeybees, weakly electric fish, and humans. Special emphasis is placed on the role of activity dependent modulation of neuronal connections in the context of learning, memory, and development of the nervous system.
Prerequisite: MCB 80.

**[MCB 110. Introduction to Quantitative Tools for Cell Biology]**
Catalog Number: 58465
Philippe Cluzel
Half course (spring term). Hours to be arranged.
This class will introduce students to the physical and mathematical tools that have become essential to analyze and understand data in cell biology. We will review concepts initially developed in physics in order to discuss real examples borrowed from classic experiments in biology. Topics to be covered: Noise, stochastic processes, single molecules, single-cell biology, robustness and evolvability of intracellular networks, modularity in biology, chaos, cell-to-cell variability, cell fate variability, cell-to-cell communication.
Note: Expected to be given in 2013–14.
Prerequisite: Knowledge of elementary statistical mechanics is helpful, but not necessary.

**MCB 111. Mathematics in Biology**
Catalog Number: 6444
Michael Manish Desai
Half course (spring term). M., W., 12–1:30. EXAM GROUP: 5, 6
Develops the mathematics needed for quantitative understanding of biological phenomena including data analysis, simple models, and framing quantitative questions. Topics include probability, transforms and linear algebra, and dynamical systems, each motivated by current biological research.
Prerequisite: Mathematics 19 or higher.

**MCB 115. Cellular Basis of Neuronal Function**
Catalog Number: 8703
Ryan Wesley Draft
Half course (fall term). M., W., F., at 2. EXAM GROUP: 7
The essential function of a neuron is to process complex signals derived from the external world. To accomplish this function, neurons employ diverse mechanisms that respond to chemical and electrical signals with incredible sensitivity and plasticity. In this course, we will study these electrical, molecular, and cellular processes using biophysical and biological approaches. Specifically, we will explore topics on excitable membranes, neurotransmission, ion channels, dendritic integration, intracellular signaling, and synaptic plasticity in the context of various model circuits in the brain.

MCB 121. Microbes in Disease and the Environment: Genetics, Cell Biology, and Physiology
Catalog Number: 19325
Karine A. Gibbs
This general microbiology course will focus on the genetics, cell biology, and physiology of microorganisms. The goal of this course is to give the students a broad overview of microbial physiology in the context of disease and environmental applications. The course will primarily consist of lectures with problem sets; we will also incorporate current and classical literature.

[*MCB 122. The Biology of Cell Division and Cancer]*
Catalog Number: 4353
Raymond L. Erikson
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
The molecular and cellular interfaces between normal cells and cancer cells will be covered in lectures and readings from the original literature. Topics will include conversion of extracellular signals to intracellular signals, protein kinase networks, mitosis, cell death, oncogenes, and suppressor genes.
Note: Expected to be given in 2013–14.
Prerequisite: Recommended: MCB 52 and MCB 54.

*MCB 129. The Brain: Development, Plasticity and Decline*
Catalog Number: 8956 Enrollment: Limited to 20.
Samuel M. Kunes
Half course (fall term). M., W., 10–11:30.
This course will deal with how the brain develops, adapts to its environment and declines with aging. Topics include cell birth and death, neural differentiation and cell identity, axon guidance and synaptic specificity, adult neurogenesis, memory and age-related cognitive decline. Assignments emphasize critical evaluation of the primary literature, experimental design and scientific writing.
Prerequisite: Permission of the instructor.

MCB 131. Computational Neuroscience
Catalog Number: 9868
Haim I. Sompolinsky (Hebrew University)
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Follows trends in modern brain theory, focusing on local neuronal circuits as basic
computational modules. Explores the relation between network architecture, dynamics, and function. Introduces tools from information theory, statistical inference, and the learning theory for the study of experience-dependent neural codes. Specific topics: computational principles of early sensory systems; adaptation and gain control in vision, dynamics of recurrent networks; feature selectivity in cortical circuits; memory; learning and synaptic plasticity; noise and chaos in neuronal systems.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.

Prerequisite: Basic knowledge of multivariate calculus, differential equations, linear algebra, and elementary probability theory.

**MCB 141. Molecular Neurobiology**

Catalog Number: 5205

*Catherine Dulac*

*Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11*

Molecular basis of sensory perception, formation and modulation of related neuronal networks during development and in the adult brain. Topics will include mechanisms of sensory discrimination at the level of receptor molecules and receptor cells and associated diseases, coding of sensory information by the brain, establishment of appropriate connections in the developing brain, epigenetic influences on sensory function. Molecular, genetic and epigenetic approaches to brain function and behavior will be discussed.

*Prerequisite:* Prerequisite: LS 1a and LS 1b. Recommended: MCB 80 and a cell or molecular biology course such as MCB 52, MCB 54, or MCB 115.

[*MCB 142. Major Advances in Classical and Molecular Genetics]*

Catalog Number: 7948 Enrollment: Limited to 20.

*Matthew Meselson*

*Half course (fall term). Tu., Th., 2–3:30.*

MCB 142 aims to develop an understanding of the conceptual development of classical and molecular genetics, starting with Mendel and Darwin. Course work includes critical reading of selected papers on the chromosomal and molecular basis of heredity, student presentations, group discussion, and submission of written answers to problem sets. Participation in class discussion of readings is essential. A substantial essay on a mutually agreed topic is due at end of reading period.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Science B.

*Prerequisite:* Life Sciences 1b or equivalent and permission of the instructor.

*MCB 144. The Power and Pitfalls of Genetical Thinking - (New Course)*

Catalog Number: 25555 Enrollment: Limited to 12.

*Nancy Kleckner and David A. Haig*

*Half course (spring term). M., W., 12–1:30. EXAM GROUP: 5, 6*

An advanced treatment of heredity, including genetic, epigenetic and evolutionary aspects, as manifested in organisms from bacteria to man. Emphasis will be placed on how analytical genetic thinking and approaches can be applied to fundamental biological questions. Course format will include lectures, reading of the primary literature, student group projects and a final paper. Suitable for students in either the physical or biological sciences.
*MCB 145. Neurobiology of Perception and Decision Making
Catalog Number: 6972
Naoshige Uchida
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
One of the current goals of neuroscience is to understand neuronal circuits underlying perception and behavior. Recent advances in neuroscience have allowed us to glimpse neuronal processes that link perception and decision making. How is sensory information processed in the brain? How does an animal chose its action? How does an animal learn from ever-changing environments and adjust their behavior? The course will examine neurophysiological studies in perception and decision-making.
Prerequisite: MCB 80 and permission of the instructor.

*MCB 146. Experience-Based Brain Development: Causes and Consequences
Catalog Number: 5390
Takao K. Hensch
Half course (spring term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17
At no time in life does the surrounding environment so potently shape brain function as in infancy and early childhood. This course integrates molecular/cellular biology with systems neuroscience to explore biological mechanisms underlying critical periods in brain development. Understanding how neuronal circuits are sculpted by experience will motivate further consideration of the social impact on therapy, education, policy, and ethics.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

MCB 151. From the Gene to the Phenotype: A Genomics Perspective
Catalog Number: 5799
William M. Gelbart
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course will explore how the information encoded in our genomes leads to both the shared phenotypic characteristics of a species as well as individual variation. Both the classical literature and the current state of the art will be discussed.
Prerequisite: Life Sciences 1b, or permission of the instructor.

[MCB 152. Genetic Analysis]
Catalog Number: 6788
Craig P. Hunter
Half course (fall term). Hours to be arranged.
An advanced course focusing on genetic analysis of fundamental cellular and developmental processes in model organisms. An emphasis is placed on reading and understanding the primary literature through introductory lectures, class discussions, and short written assignments. Students will learn how to design and interpret genetic experiments in a variety of model organisms.
Note: Expected to be given in 2013–14.
Prerequisite: Life Sciences 1b, MCB 52, and MCB 54.
[*MCB 153. The Practice of Experimental Science: a Genetics Laboratory Course*]
Catalog Number: 16796 Enrollment: Limited to 12.
Craig P. Hunter
Half course (spring term). M., 1–4. EXAM GROUP: 6, 7, 8
Students will be exposed to theoretical and practical concepts in classical and modern genetic analysis through direct laboratory experience using the model genetic organism C. elegans. This will be accompanied by journal clubs, student presentations, and lecture.
*Note:* Expected to be given in 2013–14. Laboratory will be open for after hours access.
*Prerequisite:* Life Sciences 1a, Life Sciences 1b; can be taken concurrently with MCB 52, MCB 54.

[MCB 154. Advanced Cell and Developmental Biology]
Catalog Number: 83425
Susan Mango
Half course (spring term). Tu., Th., 3–4:30. EXAM GROUP: 17, 18
This course will survey primary research papers describing topics in molecular and cellular biology. We will focus on areas of disagreement, reading pairs of papers that come to antithetical conclusions. Which is correct? Can both points of view be right? What experiments or controls would bolster the hypotheses of one or the other paper? Topics will focus on seminal findings in cell and developmental biology. Each week a different area will be covered through a combination of paper discussions, an introductory lecture and a quiz.
*Note:* Expected to be given in 2013–14. Intended for advanced undergraduates who have taken MCB 52 and MCB 54.

[MCB 156. Structural and Biophysical Analysis of Macromolecules]
Catalog Number: 8543
Victoria M. D’Souza
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course presents a detailed examination of macromolecular structure and function based on insights obtained from using modern biophysical techniques. To demonstrate concepts, the course will follow the interplay between the human immunodeficiency virus and its host cell as the virus attempts to complete an infectious cycle.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* MCB 52 and Physics at the level of PS 2/3.

[MCB 157. Developmental Genetics and Genomics - (New Course)]
Catalog Number: 20809
Craig P. Hunter
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Our goal is for students to gain a fundamental understanding of the genetic control of development in four genetically accessible animal models; the nematode C. elegans, the fruit fly Drosophila melanogaster, the zebra fish Danio rio, and the mouse Mus musculus. A focus of the course is to compare and contrast genetic analysis of and the genetic control of developmental processes and mechanisms in these four organisms. The course consists of lectures, student presentations, and written assignments.
*Prerequisite:* LS 1b
*MCB 162. Major Advances in Understanding Heredity and Evolution - (New Course)*
Catalog Number: 90518 Enrollment: Limited to 20.
Matthew Meselson and James Mallet

*Half course (spring term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17*

MCB 162 aims to develop an understanding of the major conceptual and experimental advances to our present understanding of heredity and evolution, connecting today’s science with its history and some of the personalities involved. Course work includes critical reading of original literature, student presentations, group discussion, and submission of written answers to weekly problem sets. Participation in class discussion of readings is essential. A substantial essay on a mutually agreed topic is due at the end of reading period.

*Prerequisite:* Life Sciences 1b or equivalent and permission of the instructor.

**MCB 169. Molecular and Cellular Immunology**

Catalog Number: 2518
Shiv S. Pillai (Medical School)

*Half course (fall term). Tu., Th., 10-11:30, and a 90-minute section to be arranged. EXAM GROUP: 12, 13*

The immune system is a frontier at which molecular biology, cell biology, and genetics intersect with the pathogenesis of disease. The course examines in depth the cellular and molecular mechanisms involved in the development and function of the immune system and also analyzes the immunological basis of human disease including AIDS and other infectious diseases, autoimmune disorders, allergic disorders, primary immunodeficiency syndromes, transplantation, and cancer.

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a or equivalent. Genetics and cell biology strongly recommended.

[*MCB 173. Optical Imaging in the Biological Sciences]*

Catalog Number: 3836
Jeff W. Lichtman

*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

The optical microscope has undergone a radical transformation. Recent innovations in lasers, chemistry, molecular biology, detectors, computation and optics have propelled the microscope to the cutting edge of modern biology. These complex machines are now the tools of choice for revealing structure and function in biology. This course explores the principles and practice of the “new microscopy”. Topics include the nature of light, fluorescence, image restoration, confocal, 2-photon, structured illumination and other new techniques.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Permission of the instructor; MCB 80 recommended.

**MCB 176. Biochemistry of Membranes**

Catalog Number: 3186
Guido Guidotti

*Half course (fall term). M., W., 2–4, M., at 4. EXAM GROUP: 7, 8, 9*

A course on the properties of biological membranes, essential elements for cell individuality, communication between cells, and energy transduction. Topics include: membrane structure; membrane protein synthesis, insertion in the bilayer and targeting; transporters, pumps and
channels; electron transport, H+ gradients and ATP synthesis; membrane receptors, G proteins and signal transduction; membrane fusion.

**Prerequisite:** MCB 52 and MCB 54 are recommended but not required.

### MCB 178. Biochemistry of Protein Complexes

**Catalog Number:** 63269  
**Guido Guidotti**  
**Half course (spring term). M., W., 2:30 to 4 and section. EXAM GROUP: 7, 8**  
A course on the properties of protein complexes that serve as supports, machines and motors. Topics include: hemoglobin, actin filaments, myosin function, microtubules, kinesin, metabolon, photosynthesis, rotary motors, nuclear pores and transport, proteasome. Lecture on Monday is followed by student presentations on Wednesday. The course involves reading two research papers per week, and writing a research proposal.

**Prerequisite:** Chemistry 27 and MCB 54 are recommended, but not required.

### MCB 186. Circadian Biology: From Cellular Oscillators to Sleep Regulation

**Catalog Number:** 2854  
**Charles A. Czeisler (Medical School)**  
**Half course (fall term). W., 2-5, and a weekly section to be arranged. EXAM GROUP: 7, 8, 9**  
Properties, mechanisms, and functional roles of circadian (daily) rhythms in organisms ranging from unicells to mammals. Cellular and molecular components, regulation of gene expression and physiological functions, genetic and biochemical analyses of circadian rhythms, and neurobiology of the mammalian circadian pacemaker. Mathematics and modeling of oscillatory systems and applications to circadian rhythms. Experimental studies of human rhythms, including the sleep-wake cycle and hormone rhythms, with applications to sleep disorders.

**Prerequisite:** Life Sciences 1b or equivalent, MCB 80 desirable.

### [MCB 188. Chromosomes]

**Catalog Number:** 8561  
**Nancy Kleckner**  
**Half course (spring term). Tu., Th., 2–4. EXAM GROUP: 16, 17**  
Chromosome morphogenesis in prokaryotic and eukaryotic organisms. Topics will include chromosome structure, interactions between chromosomes (sisters and homologs), DNA recombination and repair, topoisomerases, transposable elements and site-specific recombination, epigenetic inheritance. Genetic, cytological, and biochemical approaches will be integrated. Lecture, reading, and discussion of classical and current literature and consideration of future experimental directions.

**Note:** Expected to be given in 2013–14.

**Prerequisite:** Life Sciences 1b or equivalent, MCB 52, and MCB 54.

### MCB 192. Principles of Drug Discovery and Development

**Catalog Number:** 2188  
**Vicki L. Sato and Gregory L. Verdine**  
**Half course (spring term). Tu., Th., 11:30–1.**  
This interdisciplinary course will examine the process of drug discovery and development through disease-driven examples. Topics include: the efficacy/toxicity balance, the differences...
between drugs and inhibitors, the translation of cellular biochemistry to useful medicine.  
Note: May not be taken concurrently with SCRB 192. May not be taken for credit if SCRB 192 has already been taken.  
Prerequisite: MCB 52 and one year of organic chemistry. MCB 54 is recommended.

**MCB 195. Foundations of Systems Biology and Biological Engineering**  
Catalog Number: 9112  
*Johan M. Paulsson (Medical School), Galit Lahav (Medical School), Michael M. Desai, and Pamela A. Silver (Medical School)*  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
This course builds an understanding of design principles in biology. We will ask why biological circuits are built the way they are and answer using mathematical models. Topics: elementary circuits in biological networks, robustness, pattern-formation in embryos, error-correction, and evolutionary optimization.  
Note: Students from physics, engineering and other disciplines are also welcome.  
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, Life Sciences 1b and Mathematics 1a/1b and molecular cell biology at the level of MCB 52 and MCB 54. Familiarity with mathematics at the level of 19/20 is strongly recommended.

**MCB 198. Advanced Mathematical Techniques for Modern Biology**  
Catalog Number: 62117 Enrollment: Limited to 20.  
*Sharad Ramanathan and L. Mahadevan*  
*Half course (spring term). Tu., Th., 10-11:30, and a one-hour section meeting weekly. EXAM GROUP: 12, 13*  
How do we find biologically meaningful patterns in a large amount of data? How do animals learn to use patterns in the environment to infer information despite the ignorance of the underlying laws? The course will introduce Bayesian analysis, maximum entropy principles, hidden markov models and pattern theory in order to study DNA sequence, gene expression and neural spike train data. The relevant biological background will be covered in depth.  
Prerequisite: A strong background in calculus, linear algebra, fourier analysis, complex analysis at the advanced undergraduate level and an introductory knowledge of probability theory is required. Knowledge of statistical mechanics and comfort with programming will be useful.

**[MCB 199. Statistical Thermodynamics and Quantitative Biology ]**  
Catalog Number: 9072  
*David R. Nelson*  
*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*  
Course seeks to develop an understanding of thermodynamics and statistical mechanics, with applications to quantitative problems in biology such as configurations of biopolymers, equilibrium states of matter, chemical reactions and protein transport, using the concepts of entropy, free energy, adsorption, chemical kinetics and molecular diffusion.  
Note: Expected to be given in 2013–14.  
Prerequisite: Two terms of college calculus, a calculus-based physics course, and some exposure to molecular and cellular biology. Experience with statistics and differential equations not essential, but helpful.
Cross-listed Courses

[Biophysics 101 (Genomics and Computational Biology). Computational Biology]  
Chemistry 101 (formerly Chemistry 201). Organic Synthesis Towards a Genomic Medicine  
Chemistry 163. Frontiers in Biophysics  
*Chemistry 170 (formerly *Chemistry 270). Chemical Biology  
Chemistry 190. Statistical Mechanics in Chemistry and Biology  
[Human Evolutionary Biology 1420. Human Evolutionary Anatomy]  
*Human Evolutionary Biology 1463. Molecular Evolution of the Primates  
*Life Sciences 100r. Experimental Research in the Life Sciences  
[Life Sciences 110. A Microbial World]  
Life Sciences 120. Global Health Threats  
Mathematics 153. Mathematical Biology-Evolutionary Dynamics  
Physics 141. The Physics of Sensory Systems in Biology  
SCRB 125 (formerly MCB 125). Nuclear Reprogramming and Developmental Plasticity  
SCRB 150 (formerly MCB 150). Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease  
[SCRB 157. The RNA World]  
*SCRB 165. Directed Differentiation of Stem Cells  
*SCRB 167. Stem Cells and Regeneration in the Pathobiology and Treatment of Human Disease  
*SCRB 178 (formerly MCB 268). Molecular Immunology: Seminar  
SCRB 190. Understanding Aging: Degeneration, Regeneration, and the Scientific Search for the Fountain of Youth

Primarily for Graduates

[MCB 206. Introduction to Connectomics]  
Catalog Number: 2303  
Jeff W. Lichtman, R. Clay Reid (Medical School), and members of the Department  
Half course (spring term). Tu., 3:30–6:30. EXAM GROUP: 17, 18  
Focuses on how the tools of connectomics (nanoscale imaging, nanoscale and microscale cutting, fluorescent and electron-dense staining, image analysis algorithms) generate data about neural connectivity. Case studies: C. elegans, neuromuscular junction, retina, cortex.  
Note: Expected to be given in 2013–14. This course will be taught by Harvard and MIT faculty, alternating meeting locations on both the Harvard and MIT campuses.

[*MCB 208. Talking about Science]  
Catalog Number: 3605 Enrollment: Limited to 30.  
Jeff W. Lichtman and Michael E. Greenberg (Medical School)  
Half course (fall term). W., 6-8 pm. EXAM GROUP: 9  
Teaches advanced students how to give a good research talk while exposing them to seminal scientific discoveries. Emphasis will be on speaking style, lecture organization, and use of video projection tools.  
Note: Expected to be given in 2013–14. In addition to lecture material from the instructor, students will present experiments from Nobel Prize-winning work. The presentations will be
critiqued in class by the participants. Open to second year graduate students or with permission of the instructor.

**MCB 212. Topics in Biophysics**  
Catalog Number: 3351  
Howard C. Berg  
*Half course (spring term). F., 2:30–4. EXAM GROUP: 7, 8*  
Motility and sensory transduction; chemotaxis in bacteria; flagellar motility; prokaryotic and eukaryotic motor molecules.  
*Note:* Offered in alternate years. A term paper and seminar are required.

**MCB 225. Interesting Questions in Physical Biology**  
Catalog Number: 7646  
Nancy Kleckner and Mara Prentiss  
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*  
Physical biology can be defined as a discipline that seeks to understand biological processes through the lens of physics and engineering. Faculty and students will unite to review current research with the aim of identifying and pondering interesting emerging questions in this area.  
*Note:* Intended primarily for first year graduate students in the EPB PhD track but available to other graduate students and advanced undergraduates as space permits.

**MCB 234. Cellular Metabolism and Human Disease**  
Catalog Number: 0870  
Thomas Michel (Medical School) and Cheryl Denise Vaughan  
*Half course (spring term). M., W., F., 9–10:30. EXAM GROUP: 2, 3*  
Cellular and organismal metabolism, with focus on interrelationships between key metabolic pathways and human disease states. Genetic and acquired metabolic diseases and functional consequences for specific organ systems. Lectures and conferences are integrated with clinical encounters with patients.  
*Note:* Students may attend lectures in either Cambridge or Boston since they will be transmitted live from HMS to Harvard College and vice-versa; the inter-campus link will allow real-time interactions between students and faculty at each site. May not be taken concurrently with BCMP 234. May not be taken for credit if BCMP 234 has already been taken.  
*Prerequisite:* Knowledge of introductory biochemistry, genetics, and cell biology required (MCB 52 and MCB 54 or equivalent); one year of organic chemistry.

**MCB 290hfr. Current Topics in Molecular, Cellular and Organismal Biology**  
Catalog Number: 31903  
Vladimir Denic, and members of the Department  
*Half course (throughout the year). F., at 3:30. EXAM GROUP: 8, 9*  
This class teaches students how to publicly present scientific papers to a diverse audience with emphasis on contextualizing the scientific problem under discussion, critically presenting the essential data, and using an engaging presentation style.  
*Note:* Required for all first and second year graduate students in the Molecules, Cells and Organisms (MCO) Training Program; may be taken for SAT/UNS credit only.
**MCB 291. Genetics, Genomics and Evolutionary Biology**  
Catalog Number: 2833  
*Cassandra G. Extavour and Andrew W. Murray*  
*Half course (fall term). M., W., 10:30-12, and a weekly section on F., 10-12. EXAM GROUP: 3, 4*  
This course covers the fundamentals of classical genetics, molecular genetics, macro- and microevolution, phylogenetics, and developmental evolution. The emphasis is on major concepts and terminology, reading landmark primary literature, and acquainting students with research techniques.  
*Note:* Required for first year graduate students in the Molecules, Cells and Organisms (MCO) Training Program.

**MCB 292. Cellular Biology, Neurobiology and Developmental Biology**  
Catalog Number: 4288 Enrollment: Limited to 30.  
*John E. Dowling, Vladimir Denic, and Alexander F. Schier*  
*Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
The biology of the individual cell lies at the heart of multi-cellular phenomena such as development and neural function. This course will emphasize critical evaluation of the primary literature, experimental design and scientific writing.  
*Note:* Required for first year graduate students in the Molecules, Cells and Organisms (MCO) Training Program.

**MCB 293. Physical, Chemical and Molecular Biology**  
Catalog Number: 2706  
*Andres Leschziner, Victoria M. D'Souza, and Rachelle Gaudet*  
*Half course (fall term). M., W., 2:30-4. EXAM GROUP: 7, 8*  
This course will introduce basic principles in general, organic and physical chemistry, including kinetics and thermodynamics, as well as macromolecular structure. Concepts will be illustrated with examples taken from the visual system.  
*Note:* Required for first year graduate students in the Molecules, Cells and Organisms (MCO) Training Program.

**Cross-listed Courses**

**Applied Physics 291. Electron Microscopy Laboratory**  
**BCMP 235. Principles of Human Disease: Physiology and Pathology**  
[Engineering Sciences 224. Laboratory in Engineering and Physical Biology]  
**Microbiology 213. Social Issues in Biology**  
*OEB 290 (formerly *Life Sciences 190r). Microbial Sciences: Chemistry, Ecology and Evolution*  
**Systems Biology 200. Dynamic and Stochastic Processes in Cells**  
[Systems Biology 205. Synthetic Biology]

**Graduate Courses of Reading and Research**
*MCB 300. Introduction to Research
Catalog Number: 4816
Susan Mango 6386, and Erin O’Shea 5239, and members of the Department

*MCB 301. Synapse Formation
Catalog Number: 3935
Joshua R. Sanes 5094 (on leave spring term)

*MCB 304. Experimental Biological Physics and Quantitative Cell Biology
Catalog Number: 5730
Daniel Joseph Needleman 6151

*MCB 305. Signaling Processing and Systems Biology
Catalog Number: 1443
Sharad Ramanathan 6015

*MCB 306. Biophysics and Physiology of Neurons
Catalog Number: 1695
Venkatesh N. Murthy 2424 (on leave fall term)

*MCB 307. Developmental Genetics and Neurobiology
Catalog Number: 8554
Alexander F. Schier 5238

*MCB 308. Quantitative Analysis of Regulatory Networks
Catalog Number: 2226
Erin K. O’Shea 5239

*MCB 312. Military and Arms Control Applications of Biology and Chemistry
Catalog Number: 2063
Matthew Meselson 1319

*MCB 315. Structural Biology of Signaling and Transport Through Biological Membranes
Catalog Number: 9560
Rachelle Gaudet 4413

*MCB 316. Structural Biology of Retroviral Replication
Catalog Number: 8769
Victoria M. D’Souza 5584

*MCB 322. Genetics and Development
Catalog Number: 7290
Craig P. Hunter 2803
*MCB 326. Biochemical Virology  
Catalog Number: 0243  
Raymond L. Erikson 7506

*MCB 328. Neuronal Circuit Development  
Catalog Number: 5728  
Takao K. Hensch 5813

*MCB 329. Structural Biology of ATP-Dependent Chromatin Remodeling  
Catalog Number: 6060  
Andres Leschziner 5928

*MCB 330. Mechanisms of DNA Transport Across Membranes  
Catalog Number: 7228  
Briana Burton 6214

*MCB 331. Single-Cell Analysis of Transcriptional and Signaling Networks in Bacteria  
Catalog Number: 4064  
Philippe Cluzel 6215

*MCB 332. Mechanisms of Membrane-Based Cell Biological Processes  
Catalog Number: 9806  
Vladimir Denic 6216

*MCB 344. Molecular and Developmental Neurobiology  
Catalog Number: 2292  
Catherine Dulac 2801

*MCB 359. Chromosomes  
Catalog Number: 6278  
Nancy Kleckner 4697

*MCB 363. Invertebrate Development and Transcriptional Circuitry  
Catalog Number: 15771  
Susan Mango 6386

*MCB 365. Neurobiology  
Catalog Number: 8349  
John E. Dowling 3545 (on leave spring term)

*MCB 366. Synaptic Plasticity and Neuronal Networks  
Catalog Number: 1085  
Florian Engert 4290
*MCB 367. Structural Studies of Synapses  
Catalog Number: 1850  
Jeff W. Lichtman 5163

*MCB 368. Neural Circuits for Sensation and Behavior  
Catalog Number: 30878  
Naoshige Uchida 5745

*MCB 373. Cellular Biochemistry and Physiology  
Catalog Number: 8053  
J. Woodland Hastings 1311

*MCB 374. Developmental Neurobiology  
Catalog Number: 6167  
Samuel M. Kunes 3486

*MCB 377. Genetics and Development  
Catalog Number: 5598  
William M. Gelbart 4774

*MCB 378. Motile Behavior of Bacteria  
Catalog Number: 5729  
Howard C. Berg 1377 (on leave fall term)

*MCB 379. Social Behaviors and Genetics of Bacteria  
Catalog Number: 10595  
Karine A. Gibbs 6592

*MCB 381. Microbial Development  
Catalog Number: 4994  
Richard M. Losick 3561 (on leave 2012-13)

*MCB 386. Molecular Evolution  
Catalog Number: 0763  
Matthew Meselson 1319

*MCB 390. Function of Neuronal Circuits  
Catalog Number: 8883  
Markus Meister 3007

*MCB 391. Biochemistry  
Catalog Number: 4888  
Guido Guidotti 1203
Music

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Music

Alexander Rehding, Fanny Peabody Professor of Music (Chair)
Carolyn Abbate, Professor of Music
John Luther Adams, Visiting Lecturer on Composition (spring term)
Richard Beaudoin, Preceptor in Music
Andrew Gregory Clark, Senior Lecturer on Music and Director of Choral Activities
Suzannah Clark, Professor of Music (Head Tutor-spring term)
Federico Cortese, Professor of Music
Chaya Czernowin, Walter Bigelow Rosen Professor of Music (on leave fall term)
Scott L. Edwards, College Fellow in the Department of Music
Larry D. Hamberlin, Visiting Associate Professor of Music (spring term)
Christopher Hasty, Walter W. Naumburg Professor of Music
Daniel Artie Henderson, Lecturer on Music
Jill Johnson, Senior Lecturer on Music and Director of Dance (on leave fall term)
Thomas Forrest Kelly, Morton B. Knafel Professor of Music (Head Tutor-fall term) (on leave spring term)
Robert D. Levin, Dwight P. Robinson, Jr. Professor of Music (on leave fall term)
Wayne Glenn Marshall, Lecturer on Music
Ingrid Monson, Quincy Jones Professor of African-American Music, Supported by the Time Warner Endowment (on leave 2012-13)
Carol J. Oja, William Powell Mason Professor of Music (on leave 2012-13)
Olaf Leon Post, Preceptor in Music
Sindhumathi Revuluri, Associate Professor of Music (on leave 2012-13)
Roger Reynolds, Fromm Foundation Visiting Professor of Music (fall term)
Kay Kaufman Shelemay, G. Gordon Watts Professor of Music and Professor of African and African American Studies (Director of Graduate Studies)
Anne C. Shreffler, James Edward Ditson Professor of Music
Daniel Stepner, Preceptor in Music
Hans Tutschku, Fanny P. Mason Professor of Music
Katherine van Orden, Visiting Professor of Music
Richard K. Wolf, Professor of Music (on leave 2012-13)
Amnon Wolman, Visiting Professor of Music (fall term)
Other Faculty Offering Instruction in Music

John T. Hamilton, Professor of Comparative Literature
Christoph Wolff, Adams University Professor, Emeritus

Undergraduates considering a concentration in Music should meet with the Head Tutor to discuss the program. Prospective concentrators in Music are encouraged to take Music 51 in their freshman year. Students who know they are going to concentrate in Music and do not have piano background should consult with the instructor of Music 51 immediately upon arrival at Harvard. In order to obtain concentration credit for a course for which such credit is not normally given, students must petition the Department at the beginning of the term. For students not intending to concentrate in Music, the department ordinarily offers Music 1 and Music 2 every year. Other courses may be taken with permission of the instructor. See also listings in African and African American Studies, Core Curriculum, Folklore and Mythology, General Education, and Medieval Studies.

Primarily for Undergraduates

Music 1a. Introduction to Western Music from the Middle Ages to Mozart
Catalog Number: 8071
Scott L. Edwards
Half course (fall term). M., W., (F.), at 10. EXAM GROUP: 3
Exploring about 1000 years of western music history (c.800-1800), this course will consider the musical styles of particular periods and specific composers including Machaut, Du Fay, Josquin, Palestrina, Monteverdi, Handel, Bach, and Mozart.
Note: Music 1a can be taken independently of Music 1b. No prior knowledge of music is presumed. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. May not be taken for concentration credit.

Music 1b. Introduction to Western Music from Beethoven to the Present
Catalog Number: 4952
Scott L. Edwards
Half course (spring term). M., W., (F.), at 10. EXAM GROUP: 3
Continues the survey started in Music 1a, beginning with the transition from the Classical to the Romantic period. Explores the history of music in its stylistic and cultural contexts, including aspects of form, composition, social significance, and politics. Composers studied include Beethoven, Schubert, Robert and Clara Schumann, Liszt, Berlioz, Brahms, Wagner, Verdi, Mahler, Schoenberg, Berg, Stravinsky, Debussy and later 20th c. figures.
Note: Music 1b can be taken independently of Music 1a. No prior knowledge of music presumed. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. May not be taken for concentration credit.
**Music 2. Foundations of Tonal Music I**
Catalog Number: 0645 Enrollment: Limited to 100.
Olaf Leon Post
*Half course (fall term). M., W., F., at 11; . EXAM GROUP: 4*
Seeks to develop a greater understanding of music, musical analysis, and critical listening. We will study some of the organizing principles of musical works (from a range of styles) by means of composition projects, score analysis, and aural skills. While reading knowledge of simple musical notation is helpful, there will be at least one section for students with no previous experience.
*Note:* Open to all students. May not be counted for concentration credit. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B.

**[Music 3. Foundations of Tonal Music II]**
Catalog Number: 5805 Enrollment: Limited to 16.
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*Half course (spring term). M., W., F., at 3. EXAM GROUP: 8*
The first part of the course concentrates on increasing understanding and fluency in writing within the musical language of “common practice tonality”. The second part of the course looks at 20th-century techniques for composing music. The final project is a short composition that will be performed during reading period. Teaching takes place in groups of 10-12, divided according to background, with full group lectures every week.
*Note:* Expected to be given in 2013–14. May not be counted for concentration credit.  
*Prerequisite:* Music 2 or permission of the instructor.

**[Music 4. Introduction to Composition]**
Catalog Number: 2239 Enrollment: Limited to 16.
Richard Beaudoin
*Half course (spring term). W., at 3, Tu., 3–5. EXAM GROUP: 8, 17, 18*
Open to students with little or no prior experience in composition. Explores ways of thinking about and organizing basic compositional elements such as melody, harmony, rhythm and instrumental color, as well as developing skills of score preparation and analytical listening. The primary focus of the course is a series of short compositional exercises, culminating in a somewhat longer final project. Workshop performances of students’ music take place throughout the term.
*Note:* Expected to be given in 2013–14. May not be counted for concentration credit.  
*Prerequisite:* Music 2 or equivalent or permission of the instructor.

***Music 6. Harmony in Electronic Dance Music - (New Course)*
Catalog Number: 96549 Enrollment: Limited to 12.
Olaf Leon Post
*Half course (spring term). Tu., Th., 4–6.*
Analysis & composition/production of electronic dance music. Attention given primarily to musical aspects (harmony, voice-leading, form, aural skills) but technical instruction in computer software (Ableton) is provided. Course taught in workshop setting.
Note: To acquire permission, consult the iSite for further details.
**Prerequisite:** Music 2 or its equivalent in harmony skills. Permission of instructor required

**Music 51a. Theory I**
Catalog Number: 2261
Richard Beaudoin

*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*
Course unfolds the foundations of tonal music, including line, harmony, counterpoint, rhythm, timbre, and form. Includes regular practical exercises in model composition, analysis, ear-training, keyboard skills and musicianship.

**Note:** For this course a placement exam is required, which is offered the week before classes begin. Please contact the Music Department for further information. Music 51a or its equivalent is required of all concentrators. Students planning to concentrate in Music are encouraged to take the course in their freshman year. Concentrators should plan to meet this requirement by no later than the end of the sophomore year. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding.

**Prerequisite:** Basic theory and ear training skills. Basic keyboard skills are useful.

**Music 51b. Theory I**
Catalog Number: 9585
Richard Beaudoin

*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*
Continuation of the principles in Music 51a. Course engages advanced topics in harmony, counterpoint, rhythm, timbre and form. Includes regular practical exercises in model composition, analysis, ear-training, keyboard skills and musicianship.

**Note:** Music 51b or its equivalent is required of all concentrators. Students planning to concentrate in Music are encouraged to take the course in their freshman year. Concentrators should plan to meet this requirement by no later than the end of the sophomore year. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding.

**Prerequisite:** Music 51a.

**Music 91r. Supervised Reading and Research**
Catalog Number: 1298
Thomas F. Kelly and members of the Department

*Half course (fall term; repeated spring term). Hours to be arranged.*
Open to students wishing to pursue supervised study in an area not covered by the courses currently offered. Students must submit a study proposal to the faculty member with whom they wish to study and a signed proposal to the Head Tutor. May be counted for concentration only with the prior approval of the Department.

**[Music 97a (formerly *Music 97r). Music History and Repertory: Medieval to Baroque]**
Catalog Number: 0113
Thomas Forrest Kelly

*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*
An intensive survey of Western music from the middle ages to ca. 1750, providing methods of
further study of music in historical and cultural contexts as well as knowledge of repertory.

Note: Expected to be given in 2013–14. Music 97 is required of all concentrators, preferably taken in the sophomore year, or earlier by permission. Each third of the course culminates in an examination testing students’ knowledge of a large listening repertory. These examinations must be passed in order to receive credit for the course.

Prerequisite: Music 51 (may be taken concurrently).

*Music 97b. Music History & Repertory: Classical to Contemporary
Catalog Number: 71121
Anne C. Shreffler
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
An survey of western music from 1750 to yesterday. Course emphasizes listening, analysis, and historical context.

Note: Music 97b is required of all music concentrators, preferably taken in the sophomore year, or earlier by permission.

Prerequisite: Music 51 may be taken concurrently.

*Music 97c. Music History and Repertory: Music in Cross-Cultural Perspective
Catalog Number: 36288
Wayne Glenn Marshall
An intensive introduction to selected world music repertories (in this case, North America, Latin America/Caribbean and Indonesia), as well as research methods and interpretive issues in the field of ethnomusicology.

Note: Note: Music 97 is required of all concentrators, preferably taken in the sophomore year, or earlier by permission.

Prerequisite: Music 51 may be taken concurrently.

*Music 98r. Tutorial — Junior Year
Catalog Number: 5601
Thomas Forrest Kelly and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Open to junior candidates for honors in Music who have written permission to enroll from the instructor with whom they wish to work, and also from the Head Tutor in Music.

Note: With permission, may be taken for a second term.

*Music 99r. Tutorial — Senior Year
Catalog Number: 1765
Suzannah Clark (spring term), Thomas Forrest Kelly (fall term) and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Open to senior candidates for honors in Music who have written permission to enroll from the instructor with whom they wish to work, and also from the Head Tutor in Music. May be counted toward concentration credit only by honors candidates.

For Undergraduates and Graduates
[Music 101r. Dance Collaboration]
Catalog Number: 71843
Elizabeth Lerman
Half course (fall term). Tu., Th., 2–5. EXAM GROUP: 16, 17, 18
The Choreography and Design of Partnership and Collaboration: Tools, Synthesis, Action. Ask a big enough question and you will need more than one discipline to answer it. Problem solving in today’s world requires collaborative efforts on both an imaginative and concrete level. This course asserts that artistic practice, beautiful in its own right for making art, also provides a means for being active in the world. Students will learn movement-based art making tools at the beginning of the semester and later translate these actions into methods for inquiry based problem solving in the public arena. No previous dance training required, but an open mind and a willingness to commit to experimentation and personal research are essential.
Note: Expected to be given in 2013–14. No art or dance background required.

Catalog Number: 52654 Enrollment: Limited to 15.
Jill Johnson
Half course (spring term). W., F., 3–6. EXAM GROUP: 8, 9
A comprehensive study of a William Forsythe work with one of his closest collaborators. Students will watch rare rehearsal and performance footage, and examine all aspects of the choreographic process from the first movement sketches to compositional modalities, lighting, music, and dramaturgical design. A unique, rigorous and interdisciplinary course of study which will include a collaborative process to create a original dance work for performance, and expose students to all aspects of a master work by a preeminent American dance innovator.
Note: Enrollment determined by interview during the first week of class.
Prerequisite: Previous dance experience required.

*Music 105r. Fundaments of Improvisation & Composition: Dance
Catalog Number: 58855 Enrollment: Limited to 15.
Jill Johnson
Half course (fall term). W., F., 3–5. EXAM GROUP: 8, 9
Students will investigate fundamental skills of improvisation and composition. The course will employ a series of specific physical tasks and systems, taught through intensive exercises and guided improvisations which generate and modify movement and link the mind and body to innovation.
Note: Enrollment determined by interview during the first week of class.
Prerequisite: Previous dance experience required.

*Music 121a. Choral Conducting
Catalog Number: 1550 Enrollment: Limited to 10. By permission of instructor.
Andrew Gregory Clark
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Students conduct the class/choir to gain experience building and refining conducting technique. Through repertoire of various eras, students develop score reading and analysis skills, explore rehearsal methods, and consider the application of vocal pedagogy in ensemble singing.
Note: Individual sections will be scheduled.
Prerequisite: Choral or ensemble experience; ear training, keyboard, and theory background helpful.

[*Music 123r. Choral Literature of the 20th & 21st Century]*
Catalog Number: 26522 Enrollment: Limited to 20.
Andrew Gregory Clark
Half course (spring term). M., W., F., at 3.
Note: Expected to be given in 2013–14.

[*Music 127r. Advanced Conducting & Orchestral Repertory Analysis]*
Catalog Number: 68953 Enrollment: Limited to 6.
Federico Cortese
Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17
Advanced Conducting & Orchestral Repertory Analysis
Note: By audition only.

[*Music 128r. Workshop on Opera]*
Catalog Number: 12841 Enrollment: Limited to 12.
Federico Cortese
Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17
Verdi’s Falstaff. The opera and score will be studied, as well as the concept of "late style": the new styles and artistic languages experimented by great composers/artists at the end of their lives (Bach, Beethoven, Strauss, Titian, El Greco, Rembrandt). Guest speakers will be invited.
Note: Expected to be given in 2013–14. Open to singers and conductors

**Music 150a (formerly Music 154). Theory II**
Catalog Number: 4771
Alexander Rehding
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8
Continues the work of Music 51. The fall term focuses on the Classical style (Haydn, Mozart, Beethoven). Topics include harmony, phrase structure, simple forms, and sonata-form procedures. Concepts are developed through analysis, model composition, keyboard harmony and ear-training exercises.
Note: Required of all concentrators. Students who have taken Music 154 may not enroll in this course.
Prerequisite: Music 51 or equivalent.

**Music 150b. Music Theory IIb**
Catalog Number: 36063
Richard Beaudoin
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Explores chromatic harmony in 19th century instrumental and vocal forms. Concepts are developed through analysis, model composition, keyboard harmony and ear-training exercises.
*Note:* Required of all concentrators. Students who have taken Music 154 may not enroll in this course.
*Prerequisite:* Music 51 or equivalent.

**Music 151 (formerly Music 157x). Tonal Analysis**
Catalog Number: 6830
Suzannah Clark
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
*Tonality in Schubert.* Detailed examination of tonal theory and analysis through the music of Franz Schubert. The repertoire will include representative works from Schubert’s songs and song cycles, overtures, symphonies, and chamber music.
*Note:* Expected to be given in 2013–14. Open to graduate students.
*Prerequisite:* Music 150 or permission of instructor.

**Music 152 (formerly Music 157y). Post-Tonal Analysis**
Catalog Number: 4397
Christopher Hasty
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Intensive survey of compositional styles and techniques of the last 100 years. Traditional pitch-centered analysis, including set theory, as well as approaches focusing on rhythm, timbre, gesture, and other elements.
*Prerequisite:* Music 150 or permission of instructor.

**Music 153. Jazz Harmony**
Catalog Number: 10693
Daniel Artie Henderson
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Intensive survey of jazz harmony, from Tin Pan Alley and blues-based music of Jazz’s Golden era to modern jazz styles.
*Note:* Strongly recommended for those planning to take Music 186r. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

**[Music 155. Modal Counterpoint]**
Catalog Number: 7710
Christopher Hasty
Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16
Study of representative styles and genres of 16th-century polyphony. Detailed analytic work will be combined with compositional exercises.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Music 150 or permission of instructor.

**Music 156. Tonal Counterpoint: Seminar**
Catalog Number: 3930
Suzannah Clark
Counterpoint in the style of Bach. Concepts are developed through written analyses, graphic analyses, and model composition.
Prerequisite: Music 150 or permission of instructor

[Music 157r. Theories of World Music]
Catalog Number: 41629
Richard K. Wolf
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14. Music 150 or permission of instructor.

[Music 158r. Interpreting Musical Performance]
Catalog Number: 9813
Christopher Hasty
Half course (fall term). Hours to be arranged.
Analyzing Performance. Analysis of pieces aimed at discovering and evaluating possibilities for execution and perception. Repertory includes fully notated music and music that has no tradition of notation. Questions addressed are those of perception, notation, and adequacy of conventional analytic categories.
Note: Expected to be given in 2013–14. Open to graduate students.
Prerequisite: Music 150 or permission of instructor.

[Music 159r. Analysis: Repertory]
Catalog Number: 38768 Enrollment: Limited to 16.
Ingrid Monson
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Musical Repertory Analysis: Monk, Coltrane, Davis. Featuring analysis, ear training, and performance to understand key compositions and the improvisational languages of these key figures in jazz history.
Note: Expected to be given in 2013–14.
Prerequisite: Music 150 or permission of instructor

*Music 160r. Composition: Proseminar
Catalog Number: 8026
Richard Beaudoin
Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18
Open to students prepared for individual work in composition. Focus on the piano, including contemporary repertoire survey, short exercises, and a final project of modest dimensions. Incorporates readings and final performance of students’ work.
Prerequisite: Music 150 or permission of instructor.

*Music 161r. Advanced Composition
Catalog Number: 6714
John Luther Adams
Half course (spring term). W., 4–6. EXAM GROUP: 9
Advanced course in musical composition. Consists of a mixture of one-on-one and group meetings. 

Prerequisite: Music 150 or equivalent.

**Music 167r. Introduction to Electroacoustic Music**  
Catalog Number: 3806 Enrollment: Limited to 10.  
Hans Tutschku  
Half course (fall term; repeated spring term). M., 2–4. EXAM GROUP: 7, 8  
Prerequisite: One course in theory/composition or permission of instructor.

**Music 175r. Special Topics - (New Course)**  
Catalog Number: 32166  
Federico Cortese and John Hamilton  
Half course (fall term). Th., 1–4. EXAM GROUP: 15, 16, 17  
Transfigured Night: Exploring Schoenberg, the Second Viennese School and the aesthetics of the turn of the century in the German World. Will rehearse and discuss Schoenberg’s *Verklärte Nacht* and other excerpts of music of the time. Supplemental readings and discussion will center on cultural issues, philosophical questions, and theoretical implications.  
Note: Open to performers and non-performers.

**Music 180r. Performance and Analysis: Seminar**  
Catalog Number: 2294  
Daniel Stepner (fall), Robert D. Levin and Daniel Stepner (spring)  
Half course (fall term; repeated spring term). Tu., 7-10 pm. EXAM GROUP: Fall: 18  
Weekly master classes and intermittent private coachings. In the fall Preceptor Daniel Stepner will be joined by visiting Blodgett Artist in Residence John Harbison. Representative chamber music of the past and present is prepared for performance in class sessions and private coachings. Intensive class analysis as the basis of musical expression and interpretation.  
Note: Open to singers and instrumentalists. By audition only, prior to the first meeting.

**Music 181r. Performance and Interpretation - (New Course)**  
Catalog Number: 70749 Enrollment: Limited to 12.  
Federico Cortese  
Half course (fall term). Th., 1–4.  
Understanding the Second Viennese School: Performance & Interpretation.  
Note: Expected to be given in 2013–14. Audition prior to first class meeting.

**Music 182r. 17th- and 18th-Century Performance Practice**  
Catalog Number: 1460  
Robert D. Levin  
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17  
Articulation, ornamentation, improvisation, and other stylistic domains are considered from the
perspectives of historical evidence and modern performance.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Music 150 or permission of instructor.

**[Music 183r. 19th-Century and 20th-Century Performance Practice]**  
Catalog Number: 0117

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*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*

*Note:* Expected to be given in 2013–14.  
*Prerequisite:* Music 150 or permission of instructor.  

**&*Music 185r. Classical Improvisation***  
Catalog Number: 72478 Enrollment: Limited to 12.  
Robert D. Levin

*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*

Course will identify the contexts and theoretical concepts of 18th and early 19th century improvisation in vocal and instrumental music. Authentic written-out embellishments and cadenzas by composers and their contemporaries will be studied and used as a basis for both written and improvised work, to include decoration, cadenzas, preludes, modulating preludes, and free fantasies.  
*Note:* By audition only, prior to the first class.  
*Prerequisite:* Music 150 or the permission of instructor.  

**Music 186. Jazz Improvisation**  
Catalog Number: 40907  
Daniel Artie Henderson

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

Building upon Music 153, this course emphasizes rhythm, timbre, texture, signifying, blues aesthetics and other culturally valued aspects of jazz performances. Students will explore jazz’s solo and group dynamics by improvising together.  
*Note:* By audition only, prior to the first class.  
*Prerequisite:* Music 153 or permission of instructor.  

**&*Music 187rg. Chamber Music Performance***  
Catalog Number: 17431 Enrollment: Limited to 60. By audition prior to first class.  
Federico Cortese

*Half course (fall term; repeated spring term). Hours to be arranged.*  
Instrumental chamber music is prepared in private coachings. This course is only offered for a letter grade when students are involved in one or more of the following: music concentrator; enrolled in a music department course in the same semester; a member of a faculty-led ensemble.  
*Note:* This course must be taken for letter grade.  

**&*Music 187rs. Chamber Music Performance - (New Course)***  
Catalog Number: 72614 Enrollment: Limited to 60. By audition prior to first class.  
Federico Cortese

*Half course (fall term; repeated spring term). Hours to be arranged.*
Instrumental chamber music is prepared in private coachings.

*Note:* This course is only offered for a Satisfactory/Unsatisfactory grade. The course listed above (Music 187rg) may be taken for a letter grade.

[MUSIC 190GW (formerly Music 190RS). South Indian Music]
Catalog Number: 7577
Richard K. Wolf
Half course (spring term). Hours to be arranged.
South Indian Music. Analytical and contextual approach to the classical music of South India. Library or fieldwork project required.
*Note:* Expected to be given in 2013–14. By permission of instructor. This course, when taken for a letter grade, meets the General Education requirement for Aesthetic and Interpretive Understanding or the Core area requirement for Literature and Arts B. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

[Music 190r. Topics in World Music: Proseminar]
Catalog Number: 1312 Enrollment: Limited to 10.
Wayne Glenn Marshall
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Technomusicology. If previously "bi-musicality" represented cutting-edge musicological literacy, contemporary circumstances call for something akin to "technomusicology." Course concentrates on increasing interplay between music and technology while exploring new modes of research and publication.
*Note:* For music concentrators or by permission of instructor.

[Music 191r. Topics in Medieval and Renaissance Music: Proseminar]
Catalog Number: 2524
Suzannah Clark
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
The Sacred & the Profane in the 13th C. Motet. This course focuses on the Old French motet, whose texts range from the sacred to the irreverent and bawdy. We will investigate the genre’s musical intersections with the liturgy through chant and the polyphony of the Notre Dame Cathedral, as well as its intersections with the vernacular songs of the trouvères. Other issues include social context for the creation and performance of motets, manuscripts, notation.
*Note:* May be taken by students from other departments with permission of instructor.

[Music 191rs. Topics in Medieval and Renaissance Music]
Catalog Number: 2871

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Half course (spring term). Hours to be arranged.
*Note:* Expected to be given in 2013–14. No Greek language skills required, no advanced music theory required, beyond scales and intervals. For music concentrators or with permission of instructor.
**Music 192r. Topics in Music from 1600–1800: Proseminar**

Catalog Number: 6726

*Kate van Orden*

Half course (fall term). W., 1–3.

_Ballet and Spectacle in the 17th & 18th centuries_. This course considers French musical theater in all dimensions, with special concentration on ballet. Genres include ballet de cour, horse ballet and carrousels, comédie-ballet, and opera; collaborators include Jean-Baptiste Lully, Molière, Jean-Philippe Rameau, and Georg Friedrich Handel.

_Note:_ For music concentrators or with permission of instructor.

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**Music 193r. Topics in Music from 1800 to the Present: Proseminar**

Catalog Number: 3741

*Anne C. Shreffler*

Half course (spring term). W., 2–4. _EXAM GROUP:_ 7, 8

_Music since 1945_. Survey of concert music since WW II. The main emphasis will be on listening and thinking about selected works. Readings from composers’ writings and interviews, music analyses and music history texts.

_Note:_ For music concentrators or with permission of instructor.

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**Music 193rs. Topics in Music from 1800 - Present**

Catalog Number: 5935

*Scott L. Edwards*

Half course (fall term). Tu., 1–3. _EXAM GROUP:_ 15, 16

_Art, Rock, and Pop from the 1960s to the Present_. Beginning with the "British invasion," this class will consider how movements and ideas in the art world have impacted popular music from the Beatles through punk and new wave to Sonic Youth and beyond.

_Note:_ For music concentrators or with permission of instructor.

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**[Music 193rvo. Topics in Music from 1800 to the Present: Proseminar]** - (New Course)

Catalog Number: 41913

*Katherine van Orden*

Half course (spring term). W., 4–6. _EXAM GROUP:_ 9

_California in the 60s_. This seminar examines American youth culture in the "long" 1960s through the lens of music in California. Both "popular" and "art" music will be considered, including the early minimalists, L.A. and the Laurel Canyon crowd, and San Francisco psychedelia. In addition to understanding musical forms, performance styles, and the effects of technology (radio, recording, electric instruments), the class will delve into the politics of race, gender, and the draft.

_Note:_ Expected to be given in 2013–14.

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**[Music 194gs. Special Topics: Proseminar]**

Catalog Number: 2846

_Instructor to be determined_

Half course (spring term). _Hours to be arranged._

_Note:_ Expected to be given in 2013–14.
**music 194r. special topics - (new course)**
catalog number: 98795
kay kaufman shelemay
half course (spring term). tu., 12–3. exam group: 14, 15, 16
music in jewish life. approaches to music in jewish cultural and religious life with subject matter spanning historical epochs, crossing geographic boundaries, and incorporating diverse musical styles. the course will incorporate presentations by visiting starr fellows on campus at the center for jewish study during spring, 2013, to pursue projects on the course theme. requires an independent research project and class presentations. open to both upper level undergraduates and graduate students by permission of instructor.

[**music 195r. topics in music from 1900 - present**]
catalog number: 68347
anne c. shreffler
half course (spring term). hours to be arranged.
music since 1945. a survey of different schools and styles of composition in european and american art music since the ww ii, with consideration of the intellectual and historical context of the works studied.
note: expected to be given in 2013–14. for music concentrators or with permission of instructor.

cross-listed courses

**aesthetic and interpretive understanding 24** (formerly literature and arts b-51). first nights: five performance premieres
[aesthetic and interpretive understanding 31 (formerly literature and arts b-85). american musicals and american culture]
**african and african american studies 114x. from cesária évora to dama do bling: music, language, and digital media in the former portuguese colonies - (new course)**
[african and african american studies 179 (formerly literature and arts b-82). jazz, freedom, and culture]
[african and african american studies 182. from r & b to neo soul: black popular music and cultural transformation]
**german 182. music and german national identity**

primarily for graduates

**music bhf. exercises in tonal writing and analysis**
catalog number: 3045
olaf leon post
half course (throughout the year). fall: w., 10–12.
includes theory (level of music 150) as well as keyboard and ear training.
**note:** required of all graduate students. this requirement must be met before admission to the general examination.

**music 201a. current methods in historical musicology**
catalog number: 4975
Katherine van Orden  
Half course (spring term). Th., 10–12. EXAM GROUP: 12, 13  
Introduction to musicological scholarship drawing upon theoretical frameworks, and working methods of historical musicology. Includes aspects of the history of the discipline of musicology, as well as newer methodologies. Students will read relevant theoretical texts from other disciplines and consider the possibilities of interdisciplinary projects within musicology.  
*Note:* Graduate students only. May be taken independently by students from other departments with permission of instructor.

**Music 201b. Current Methods in Ethnomusicology**  
Catalog Number: 3995  
Kay Kaufman Shelemay  
Half course (fall term). Tu., 9:30–12.  
Focuses on introduction to scholarly study of music with emphasis on the history and methodologies of ethnomusicology. Theories of music in culture, field methods, analytical and notational strategies, and critical tools for scholarship.  
*Note:* May be taken by students from other departments with permission of instructor.

[**Music 205r. Medieval Notation**]  
Catalog Number: 64011  
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Half course (spring term). Hours to be arranged.  
*Note:* Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

**Music 206r. Research Methods in Ethnomusicology: Musical Ethnography**  
Catalog Number: 6891  
Kay Kaufman Shelemay  
Half course (spring term). W., 10–12. EXAM GROUP: 3, 4  
An introduction to the theories and methods of ethnomusicological fieldwork, including changing conceptions of the research site, ethical concerns, interview techniques, the ethnography of musical performance, and data analysis and interpretation.  
*Note:* Individual research project required. Open to undergraduates with permission of instructor.

**Music 207r. Ethnomusicology: Seminar**  
Catalog Number: 2149  
Wayne Glenn Marshall  
Half course (fall term). W., 10–12.  
*Music, Race and Nation.* Recent theoretical perspectives on race and nationalism vis-a-vis music, both from within ethno/musicology and beyond, followed by a series of specific studies which articulate music’s relationship to these processes and projects.  
*Note:* Open to undergraduates with permission of instructor.

[**Music 207rs. Ethnomusicology: Seminar**]  
Catalog Number: 8999  
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Note: Expected to be given in 2013–14.

Music 208r. Ethnomusicology: Seminar
Catalog Number: 2232
Wayne Glenn Marshall
Half course (spring term). Tu., 4–6. EXAM GROUP: 18
Musical Publics. How do musical texts address particular publics? Course examines public spheres in historical and theoretical perspective, spanning the rise of print culture, the broadcast era, and the advent of counterpublics and networked publics.

Note: Open to undergraduates with permission of instructor.

Music 208rs. Ethnomusicology: Seminar - (New Course)
Catalog Number: 44783
Kay Kaufman Shelemay
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
African Musical Ethnographies. This seminar will explore selected African musical traditions through a critical, comparative reading of recent musical ethnographies, with accompanying audio and visual materials. We will survey African music histories, performance styles, and systems of meaning, taking into account the prominence and heterogeneity of musical materials across the African continent; the manner in which musical expression is linked to other aspects of African life; and insights that the transmission and performance of music can offer into a wide range of subjects and issues. This seminar is designed for students interested in the expressive culture of African societies as well as the manner in which these traditions have been studied. Seminar members will be designated to serve as leaders for discussion of assigned monographs. A term project is required.

[Music 209r. Ethnomusicology: Seminar]
Catalog Number: 4022
Instructor to be determined
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

Music 212r. Chant: Seminar
Catalog Number: 4984
Thomas Forrest Kelly
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Chant. Transcribing the Beneventan Chant. In preparation for a new edition, the seminar will consider the sources and the music of one of the earliest repertories of Western music, native to southern Italy.

Note: Open to undergraduates with permission of instructor.

[Music 213r. Topics in Medieval Polyphony]
Catalog Number: 8384
Instructor to be determined
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.

[Music 214r. Renaissance Music: ]
Catalog Number: 7825
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Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

Music 214rvo. Baroque: Seminar
Catalog Number: 6817
Kate van Orden
Words & Music in the Renaissance. Text-music relations from Josquin to Monteverdi. Motets, madrigals and chansons read through against cultural paradigms defining the age. Will also problematize the "words & music" analytical approach, questioning its overwhelming importance in the historiography of Renaissance music.
Note: Open to undergraduates with permission of instructor.

[Music 216r. 18th-Century Music: Seminar]
Catalog Number: 1802
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Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

Music 217r. 19th-Century Music: Seminar
Catalog Number: 9814
Carolyn Abbate
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Wagner’s Tristan und Isolde from medieval epic, to 1857-59, through 2012. The seminar aims for deep knowledge: we read Gottfried’s Tristan poem in its entirety, and each act of the opera is the focus of a weekly meeting. This is the starting point for larger aesthetic issues, including the opera’s role in philosophy; issues of performance and unperformability; music theory’s obsession with Tristan; the opera in film, film music, and postmodern theater. Logistics permitting, the seminar will have one meeting in Toronto to attend The Tristan Project (Bill Viola, Peter Sellars, Canadian Opera Company) in late February.
Note: Open to undergraduates with permission of instructor.

Music 218r. 20th-Century Music: Seminar
Catalog Number: 0774
Anne C. Shreffler
Patronage and Contemporary Music: Paul Fromm. The seminar will work with the archives of Paul Fromm, one of the most significant American patrons of contemporary music, to create an
exhibit in the Loeb Music Library and to accompany the Fromm concerts.  
*Note:* Open to undergraduates with permission of instructor.

**Music 219r, 19th- and 20th-Century Music**  
Catalog Number: 2275  
*Larry D. Hamberlin*  
*Half course (spring term). F., 3–5. EXAM GROUP: 8, 9*  
*Note:* Open to undergraduates with permission of instructor.

**[Music 219rs. 19th and 20th Century Music]**  
Catalog Number: 1518  
*Sindhumathi Revuluri*  
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*  
*Music and the Moving Image.* The relationship between music and film over time, in national contexts, and its effect on other musical productions. Course considers how music functions alongside other moving images (dance, animation, sound art).  
*Note:* Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

**Music 220r, History of Music Theory**  
Catalog Number: 20956  
*Suzannah Clark*  
*Half course (fall term). F., 10–12.*  
*Quirks in the Major-Minor System: Theories of Harmony c. 1800-1935.* Examines how theorists of the long 19th century construed the rudiments of tonal music (scales and triads) and how this influenced their notion of key relations, modulation, and form. Focus on both French and German traditions.  
*Note:* Open to undergraduates with permission of instructor.

**[Music 221r. Current Issues in Music Theory]**  
Catalog Number: 5926  
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*Half course (spring term). Tu., 10–12. EXAM GROUP: 12, 13*  
Explores current trends and debates in music theory, covering developing music theories, approaches in analysis, and topics in the history of music theory.  
*Note:* Expected to be given in 2013–14.

**Music 222r, Schenkerian Analysis I**  
Catalog Number: 4055  
*Suzannah Clark*  
*Half course (spring term). Tu., 10–12. EXAM GROUP: 12, 13*  
Introduction to the theories and graphing techniques of Heinrich Schenker and his followers
through the analysis of selected works.
Note: Open to undergraduates with permission of instructor.

[Music 223r. Neo-Riemannian Analysis]
Catalog Number: 6696
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Half course (spring term). Th., 10–12. EXAM GROUP: 12, 13
Neo-Riemannian Analysis. Explores the new body of transformational analytical techniques usually grouped as “Neo-Riemannian Theory.” Analysis of pertinent musical passages, discussion of key texts (Riemann, Lewin, Hyer, Cohn, Kopp), context and limits of these ideas. Note: Expected to be given in 2013–14. Open to undergraduates with permission of instructor.

Music 230r (formerly Music 230ar). Topics in Music Theory
Catalog Number: 5712
Christopher Hasty
Half course (fall term; repeated spring term). Fall: Th., 10–12; Spring: Th., 1–3. EXAM GROUP: Fall: 12, 13; Spring: 15, 16
Note: Open to undergraduates with permission of instructor.

Music 250hf. Colloquium on Teaching Pedagogy
Catalog Number: 92429
Christopher Hasty
Half course (throughout the year). Tu., at 10.
The Craft of Teaching. Devoted to the craft of teaching, the course considers all major facets of academic teaching practices (lectures, tutorials, discussion, syllabi, advising, grading, etc.). Note: Required of all third year graduate students.

Music 261r. Composition: Seminar
Catalog Number: 3326
Amnon Wolman (fall term) and John Luther Adams (spring term)
Half course (fall term; repeated spring term). Hours to be arranged.
For first and second year graduate students prepared for work in original composition.

Music 262r. Composition: Seminar
Catalog Number: 4457
Chaya Czernowin (spring term) and Roger Reynolds (fall term)
Half course (fall term; repeated spring term). Hours to be arranged.
For second year and advanced graduate students prepared for work in original composition.

Music 263r. Intimate Sound Installations - (New Course)
Catalog Number: 92848
Hans Tutschku
Half course (fall term). Tu., 1–4. EXAM GROUP: 15, 16, 17
Intimate Sound Installations. The course is designed for Music and VES students to explore
sound installations as intimate and private listening experiences. Students will build and compose their works and change the Sert Gallery Cafe at the Carpenter Center into an acoustic search-space.

[Music 264r. Electronic Music Composition: Seminar]
Catalog Number: 1939
Hans Tutschku
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Students will compose an instrumental work (1-2 players) with live electronics, using Max/MSP.
Note: Expected to be given in 2013–14.
Prerequisite: Previous knowledge of electronic music techniques, or permission of instructor.

Music 264rs. Electronic Music: Composition
Catalog Number: 3357
Hans Tutschku
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Multichannel electroacoustic composition. Multichannel electroacoustic composition using 8 and 16 channel loudspeaker arrays to convey real and virtual spaces. Each student will compose an electroacoustic piece for Hydra.
Prerequisite: Previous knowledge of Max/MSP.

[Music 265r. Orchestration]
Catalog Number: 2379 Enrollment: Limited to 8.
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Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
Note: Expected to be given in 2013–14. Open to composition graduate students or with permission of instructor.

[Music 270r. Special Topics]
Catalog Number: 3727
Instructor to be determined
Half course (spring term). M., 10–12.
Critical analysis.
Note: Expected to be given in 2013–14.

Music 271r. Fromm Seminar in Composition
Catalog Number: 1311
Roger Reynolds
Half course (fall term). M., 10–12.

Music 272r. Special Topics
Catalog Number: 2059
Chaya Czernowin
Half course (spring term). M., 10–12. EXAM GROUP: 3, 4
Critical Analysis.
Music 295r. Frameworks in the Humanities: The Art of Listening (Graduate Seminar in General Education) - (New Course)
Catalog Number: 77487
Alexander Rehding and John T. Hamilton
Half course (spring term). F., 1–3. EXAM GROUP: 6, 7
How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on “The Art of Listening,” by addressing questions such as the distinction between hearing and listening and, ultimately, between sense and sensibility.
Note: The seminar will design and develop a General Education course on these themes for undergraduates.

Graduate Courses of Reading and Research

*Music 300. Reading and Research for Advanced Students
Catalog Number: 2504
Carolyn Abbate 5304, Richard Beaudoin 6255, Suzannah Clark 5718, Chaya Czernowin 6714 (on leave fall term), Christopher Hasty 4445, Jill Johnson 2033 (on leave fall term), Thomas Forrest Kelly 1324 (on leave spring term), Robert D. Levin 3482 (on leave fall term), Ingrid Monson 1591 (on leave 2012-13), Carol J. Oja 4599 (on leave 2012-13), Alexander Rehding 4651, Sindhumathi Revuluri 5846 (on leave 2012-13), Kay Kaufman Shelemay 3483, Anne C. Shreffler 4656, Hans Tutschku 5147 (fall term only), Richard K. Wolf 1386 (on leave 2012-13), and Christoph Wolff 4532 (spring term only)
Individual work on specific topics not included in the announced course offerings.

*Music 301. Reading and Research
Catalog Number: 6543
Carolyn Abbate 5304, Suzannah Clark 5718, Christopher Hasty 4445, Thomas Forrest Kelly 1324 (on leave spring term), Ingrid Monson 1591 (on leave 2012-13), Carol J. Oja 4599 (on leave 2012-13), Alexander Rehding 4651, Sindhumathi Revuluri 5846 (on leave 2012-13), Kay Kaufman Shelemay 3483, Anne C. Shreffler 4656, Hans Tutschku 5147, Richard K. Wolf 1386 (on leave 2012-13), and Christoph Wolff 4532 (spring term only)
Individual work in preparation for the General Examination for the PhD degree.
Note: May not be counted toward course requirements for the PhD degree.

*Music 309. Doctoral Colloquium
Catalog Number: 2260
Anne C. Shreffler 4656
Half course (spring term). Hours to be arranged.

*Music 310. Direction of Doctoral Dissertations
Catalog Number: 1819
Carolyn Abbate 5304, Suzannah Clark 5718, Chaya Czernowin 6714 (on leave fall term), Christopher Hasty 4445, Thomas Forrest Kelly 1324 (on leave spring term), Robert D. Levin 3482 (on leave fall term), Ingrid Monson 1591 (on leave 2012-13), Carol J. Oja 4599 (on leave 2012-13), Alexander Rehding 4651, Sindhumathi Revuluri 5846 (on leave 2012-13), Kay
Near Eastern Languages and Civilizations

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Near Eastern Languages and Civilizations

Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures (Chair)
Dalia Abo Haggar, Preceptor in Arabic
Irit Aharony, Senior Preceptor in Modern Hebrew
M. Shahab Ahmed, Associate Professor of Islamic Studies
Sami Mohmoud Alkyam, Preceptor in Arabic
Nour Barmada abida, Preceptor in Arabic
Shaye J.D. Cohen, Nathan Littauer Professor of Hebrew Literature and Philosophy (on leave spring term)
Khaled El-Rouayheb, Gardner Cowles Associate Professor of Islamic Intellectual History (Director of Undergraduate Studies)
John L. Ellison, Lecturer on Near Eastern Languages and Civilizations
Avraham Faust, Visiting Professor of Near Eastern Languages and Civilizations (Bar-Ilan University)
William Albert Graham, Murray A. Albertson Professor of Middle Eastern Studies and University Distinguished Service Professor (on leave 2012-13)
William E. Granara, Professor of the Practice of Arabic on the Gordon Gray Endowment
Rachel L. Greenblatt, Associate Professor of Near Eastern Languages and Civilizations
Jay M. Harris, Harry Austryn Wolfson Professor of Jewish Studies and Dean of Undergraduate Education
Wolfhart P. Heinrichs, James Richard Jewett Professor of Arabic (on leave spring term)
Feryal Hijazi, Preceptor in Arabic
Susan M. Kahn, Lecturer on Near Eastern Languages and Civilizations
Ousmane Kane, Prince Alwaleed Bin Talal Professor of Contemporary Islamic Religion and Society (Divinity School)
Eitan Lev Kensky, Preceptor in Yiddish
Chad Kia, Lecturer on Persian Literature and Culture
Nevenka Korica, Preceptor in Modern Arabic
Luke Anthony Leafgren, Lecturer on Near Eastern Languages and Civilizations
Lee I. Levine, Gerard Weinstock Visiting Professor of Jewish Studies (Hebrew University of
Jerusalem)
Anne Löhner, Lecturer on Near Eastern Languages and Civilizations
Peter Machinist, Hancock Professor of Hebrew and Other Oriental Languages
Peter Der Manuelian, Philip J. King Professor of Egyptology
Benjamin Morris, Rohr Visiting Professor of Modern Israel Studies
Ilana Pardes, Visiting Professor of Comparative Literature and of Near Eastern Languages and Civilizations (*Hebrew University*)
Daniel Reza Rafinejad, Preceptor in Persian
James R. Russell, Mashtots Professor of Armenian Studies
Richard J. Saley, Lecturer on Near Eastern Languages and Civilizations
P. Oktor Skjaervo, Aga Khan Professor of Iranian (on leave spring term)
Piotr Steinkeller, Professor of Assyriology
Salim Tamari, Shawwaf Visiting Associate Professor of Arabic and Islamic Studies (*Birzeit University*) (spring term)
Himmet Taskomur, Preceptor in Ottoman and Modern Turkish
Ruth R. Wisse, Martin Peretz Professor of Yiddish Literature and Professor of Comparative Literature (on leave fall term)
Paul Herbert Wulfsberg, Preceptor in Arabic
Malika Zeghal, Prince Alwaleed Bin Talal Professor in Contemporary Islamic Thought and Life

Other Faculty Offering Instruction in the Department of Near Eastern Languages and Civilizations

Michael D. Coogan, Visiting Lecturer on Old Testament/Hebrew Bible (*Divinity School*)
John L. Ellison, Lecturer on Near Eastern Languages and Civilizations
Baber Johansen, Professor of Islamic Religious Studies (*Divinity School*)
Cemal Kafadar, Vehbi Koc Professor of Turkish Studies (on leave 2012-13)
Jon D. Levenson, Albert A. List Professor of Jewish Studies (*Divinity School*)
Roy Mottahedeh, Gurney Professor of History (on leave spring term)
Bernard Septimus, Jacob E. Safra Professor of Jewish History and Sephardic Civilization, Emeritus
Lawrence E. Stager, Dorot Professor of the Archaeology of Israel, Emeritus
D. Andrew Teeter, Associate Professor of Hebrew Bible/Old Testament (*Divinity School*)

Affiliates of the Department of Near Eastern Languages and Civilizations

Near Eastern Civilizations

Primarily for Undergraduates

*Near Eastern Civilizations 91r. Supervised Reading and Research*
Catalog Number: 1132
*Khaled El-Rouayheb and members of the Department*
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research in subjects not treated in regular courses.
*Near Eastern Civilizations 97r. Group Tutorial—Sophomore Year
Catalog Number: 0167
James R. Russell and members of the Department
An introduction to the cultures and literatures of the Near East in ancient, classical, and modern times, emphasizing major themes and problems that cut across individual cultures and historical periods.

*Near Eastern Civilizations 98r. Tutorial — Junior Year
Catalog Number: 2612
Khaled El-Rouayheb and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Designed for juniors concentrating in Near Eastern Languages and Civilizations.

*Near Eastern Civilizations 99r. Tutorial — Senior Year
Catalog Number: 6623
Khaled El-Rouayheb and members of the Department
Full course. Hours to be arranged.
Note: Designed for seniors concentrating in Near Eastern Languages and Civilizations.

For Undergraduates and Graduates

Cross-listed courses

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]

Primarily for Graduates

Graduate Courses of Reading and Research

*Near Eastern Civilizations 300. Direction of Master’s Thesis
Catalog Number: 2448
Wolfhart P. Heinrichs 4988, William E. Granara 1054, Susan M. Kahn 4833, Jon D. Levenson (Divinity School) 2264, Roy Mottahedeh 1454, and John S. Schoeberlein 1016

*Near Eastern Civilizations 390. Direction of Doctoral Dissertations
Catalog Number: 3041
Ali S. Asani 7739, Shaye J.D. Cohen 4180 (on leave spring term), William Albert Graham 4156 (on leave 2012-13), William E. Granara 1054, Jay M. Harris 2266, Wolfhart P. Heinrichs 4988 (on leave spring term), Jon D. Levenson (Divinity School) 2264, Peter Machinist 2812, Peter Der Manuelian 4279, James R. Russell 3411, Bernard Septimus 7160, P. Oktor Skjaervo 2869 (on leave spring term), Lawrence E. Stager 1468, Piotr Steinkeller 7337, Ruth R. Wisse 3177 (on leave fall term), and Malika Zeghal 6744

The Middle East in Antiquity


**Ancient Near Eastern and Biblical Studies**

See also below under Akkadian and Sumerian, Aramaic, Hebrew, and Semitic Philology.

**Primarily for Undergraduates**

**Cross-listed Courses**

[Culture and Belief 13. The Contested Bible: The Sacred-Secular Dance]

**Culture and Belief 23 (formerly Literature and Arts C-70). From the Hebrew Bible to Judaism, From the Old Testament to Christianity**

[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]

**For Undergraduates and Graduates**

**Ancient Near East 100. History of the Ancient Near East:**
Catalog Number: 0702
Anne Löhnert

*Half course (fall term). M., W., at 2; EXAM GROUP: 7*
This course provides an overview of the history of the ancient Near East, with a focus on ancient Mesopotamia. It begins with the advent of writing in the late fourth millennium B.C.E. and ends with the fall of Babylon to Cyrus the Great, in 539 B.C.E. The course combines archaeological, art historical, and textual data to explore the extraordinarily rich history of this region.

*Note:* Offered jointly with the Divinity School as 1115.

**Ancient Near East 102. Introduction to Mesopotamian Religion**
Catalog Number: 0486
Piotr Steinkeller

*Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13*
A survey of the history and major concerns of ancient Mesopotamian religion from prehistoric times down to the reign of Alexander the Great. Among the topics treated are the key figures of the Sumero-Babylonian pantheon, the major mythological compositions (read in translation), personal religion, cosmogonies and theogonies, magic and divination, Mesopotamian temples, and cult and ritual. The course makes rich use of ancient iconography.

*Note:* Offered jointly with the Divinity School as 3661.

*[Ancient Near East 104. Babylon]*
Catalog Number: 63543
Instructor to be determined

*Half course (fall term). M., W., (F.), at 2. EXAM GROUP: 7*
An introduction to the ancient city of Babylon, including both its history as a seat of political power and its legacy in the Western tradition. Topics include the physical layout of the city, daily life in Babylonian society, what we know about such landmarks as the Hanging Gardens of Babylon and the Tower of Babel, and Babylonian contributions to literature, religion, law, and astronomy. Also covered are the city’s use as a symbol of wickedness in the Judeo-Christian
tradition, the future of the site, and the broader cultural heritage of Iraq. The course integrates archaeological, art historical, and textual data from the Near East and beyond to explore these issues. 

Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for either Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Historical Study B.

[Ancient Near East 105. History of the Ancient Near East: The Levant (up to Alexander the Great)]
Catalog Number: 0711
Peter Machinist
Half course (spring term). Tu., Th., at 12. EXAM GROUP: 14
The civilization and cultural traditions of the peoples of Syria-Palestine from the third millennium to the time of Alexander the Great.
Note: Expected to be given in 2014–15.

Ancient Near East 107. History and Historiography in the Ancient Near East
Catalog Number: 0665
Peter Machinist
Half course (fall term). M., W., (F.), at 3. EXAM GROUP: 8
Conceptions of history and the practice of historical writing in the ancient Near East. Discussions based on a comparative study of texts from a variety of cultural traditions, such as the Hittites, Mesopotamia, ancient Israel/Hebrew Bible, and Second Temple Judaism, together with classical Greece.
Note: Offered jointly with the Divinity School as 1427.

Ancient Near East 111. Law in the World of the Bible
Catalog Number: 6397
Peter Machinist
Half course (spring term). Tu., 1–3. EXAM GROUP: 6, 15, 16
An examination of what law was and how it operated in ancient Israel through its primary expression in the Hebrew Bible. Attention to the wider contexts of law in the ancient Near East, especially Mesopotamia, in which Biblical law originated, and to the legacy of Biblical law in the subsequent traditions of early Judaism.
Note: Offered jointly with the Divinity School as 1129.

Ancient Near East 120a. Introduction to the Hebrew Bible/Old Testament 1: Pentateuch and Former Prophets
Catalog Number: 6544
D. Andrew Teeter (Divinity School)
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
A critical introduction to the literature and theology of the Hebrew Bible, considered in light of the historical contexts of its formation and the interpretive contexts of its reception within Judaism and Christianity. The course, the first part of a divisible, year-long sequence, will focus
on the major biblical narrative traditions, the Pentateuch and Former Prophets.  
*Note:* Offered jointly with the Divinity School as 1102.

**Ancient Near East 120b. Introduction to the Hebrew Bible/Old Testament 2: Latter Prophets and Writings**  
Catalog Number: 22968  
*D. Andrew Teeter (Divinity School)*  
*Half course (spring term). Tu., Th., at 10-11:30, and a section to be arranged. EXAM GROUP: 12, 13*  
A critical introduction to the literature and theology of the Hebrew Bible, considered in light of the historical contexts of its formation and the interpretive contexts of its reception within Judaism and Christianity. The course, the second part of a divisible, year-long sequence, will focus on the Latter Prophets and the Writings.  
*Note:* Offered jointly with the Divinity School as 1103.

**[Ancient Near East 126. History of the Religion of Ancient Israel]**  
Catalog Number: 1672  
*Peter Machinist*  
*Half course (spring term). Hours to be arranged.*  
The study of ancient Israelite religion and culture in comparative historical context. Topics examined include conceptions of divinity, prophecy, law, kingship, and cult. Through such topics the aim is to see how Israel related to other cultures of the ancient Near East and, thus, of what value the study of the other cultures has in understanding the character of Israelite religion itself.  
*Note:* Expected to be given in 2014–15. Offered jointly with the Divinity School as 1110.

**[Ancient Near East 131. Readings in the Septuagint]**  
Catalog Number: 3661  
*Richard J. Saley*  
*Half course (fall term). Tu., Th., at 12. EXAM GROUP: 14*  
This course aims to increase facility with Septuagint Greek by reading representative prose portions of the Septuagint and studying the peculiarities of the grammar inductively. The basics of Hellenistic Greek will be reviewed as necessary.  
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 4215.  
*Prerequisite:* One year of Greek.

**Ancient Near East 132. Ancient Jewish Wisdom Literature**  
Catalog Number: 9522  
*Jon D. Levenson (Divinity School)*  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
A close critical reading and interpretation of works thought to derive from the Wisdom tradition of ancient Israel, through the Second Temple period. The workings of the world and the ways of God as they appear in works such as Proverbs, Job, Qohelet, Ben Sira, some Psalms, the Wisdom of Solomon, Fourth Maccabees, and Pseudo-Phocylides as well as narratives such as the Joseph story, Esther, and Daniel. Egyptian and Mesopotamian antecedents and parallels briefly considered. Emphasis on matters of worldview and literary form.
Ancient Near East 134. Genesis: Narrative Artistry and Theological Meanings
Catalog Number: 3291
Jon D. Levenson (Divinity School)
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
A close critical reading in English of the book of Genesis with an eye both to the storytellers’ techniques and to the moral and theological dimensions of the text. Emphasis will be given to literary and religious rather than historical and editorial issues.
Note: Offered jointly with the Divinity School as 1416.
Prerequisite: Ancient Near East 120 or an equivalent introduction to the historical-critical study of the Hebrew Bible.

[Ancient Near East 155r. Ancient Mesopotamia: Archaeology and Texts]
Catalog Number: 11874
Piotr Steinkeller and Jason A. Ur
Half course (spring term). Hours to be arranged.
Ancient Mesopotamia was the world’s first literate urban civilization. This class will examine the origins and evolution of cities, temples, and government from two complementary perspectives: the archaeological record and cuneiform inscriptions in translation. Activities will include visits to museum collections (Peabody, Semitic Museum, Boston MFA), hands-on experience with creating cuneiform tablets, and virtual tours of southern Iraq using satellite imagery.
Note: Expected to be given in 2013–14.

Catalog Number: 19227
Avraham Faust (Bar-Ilan University)
Half course (fall term). M., W., at 1. EXAM GROUP: 6
This course seeks to study ancient Israelite society during the Iron Age through an examination of archaeological evidence and written sources. The course aims to help achieve a better understanding of Israelite society, as well as to use this understanding as a case study in anthropological archaeology. Among the issues to be discussed are: socioeconomic stratification, family structure, community organization, urban planning, ideology, cosmology, ethnicity and processes of social change.

[Ancient Near East 165. The Chosen People]
Catalog Number: 16825
Michael D. Coogan (Divinity School)
Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
A consideration of the concept of the biblical motif of divine choice of individuals and groups, with close reading of representative texts in the Hebrew Bible/Old Testament. Knowledge of Hebrew not required.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1120.
Prerequisite: Introduction to Hebrew Bible/Old Testament or the equivalent.

Cross-listed Courses

English 102g. Introduction to Old English: Biblical Literature - (New Course)

Primarily for Graduates

Ancient Near East 210. Textual Criticism of the Hebrew Bible: Seminar
Catalog Number: 5492
Richard J. Saley
Half course (fall term). Tu., 3–6. EXAM GROUP: 17, 18
This course focuses on the art of recovering the text of the Hebrew Bible using Hebrew and Greek manuscripts as well as other early textual witnesses.
Note: Offered jointly with the Divinity School as 1819.
Prerequisite: At least two years of Hebrew and one year of Greek; some knowledge of Aramaic, Latin, and Syriac is helpful but not required.

Ancient Near East 222. History of the Study of the Hebrew Bible: From the Renaissance to the Present: Seminar
Catalog Number: 8086
Peter Machinist
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
Surveys Hebrew biblical scholarship since the Renaissance, focusing on particular scholars and their representative and seminal works. The central theme is the emergence of and reactions to a historical-critical understanding of the Bible.
Note: Offered jointly with the Divinity School as 1425.
Prerequisite: A background in the study of the Hebrew Bible. Recommended also is some acquaintance with biblical Hebrew and at least one of the following: French, German, modern Hebrew.

[Ancient Near East 225. The Greek Bible in History and Theology: Seminar]
Catalog Number: 2475
D. Andrew Teeter (Divinity School)
An exploration of social, historical, interpretive, and theological issues associated with the so-called Septuagint and its complex relationship to early Judaism and Christianity. Emphases include origins, eschatology, messianism, halakhah, NT backgrounds, and biblical theology.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1301.
Prerequisite: Basic reading knowledge of Greek and Hebrew.

Ancient Near East 228. The History and Archaeology of Jerusalem - (New Course)
Catalog Number: 61843
Lee I. Levine (Hebrew University of Jerusalem)
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9
Jerusalem as urban center and sacred center in the one thousand years between Kings David and Herod. By examining archaeological and literary sources, the course will focus on the major events and figures that forged the city’s political, social, and religious life.

Note: Offered jointly with the Divinity School as 1421.

**Ancient Near East 230. Ethnicity and Boundary Maintenance in Ancient Israel of the Iron I Period: Israelites, Philistines and Canaanites - (New Course)**

Catalog Number: 85856

Avraham Faust (Bar-Ilan University)

Half course (spring term). Th., 11–1. EXAM GROUP: 13, 14

The main aims of the course are to discuss the emergence of ethnic groups in and around the land of Israel during the early Iron Age, with a focus on Israel’s ethnogenesis, and to analyze the ethnic negotiations among Israelites, Philistines and Canaanites. The course will also address various theoretical and conceptual issues related to ethnicity, including how and when ethnicity emerges, the interrelations between it and other social processes, as well as the thorny problems involved in the identification of ethnicity in the archaeological record. Some previous knowledge of ancient Near Eastern history and archaeology assumed.

**Graduate Courses of Reading and Research**

* **Ancient Near East 310. Reading and Research in Ancient Near Eastern Archaeology**

Catalog Number: 4264

Lawrence E. Stager 1468

* **Ancient Near East 320. Reading and Research in Ancient Mesopotamian Civilization**

Catalog Number: 5678

Peter Machinist 2812 and Piotr Steinkeller 7337

* **Ancient Near East 330. Reading and Research in Biblical Studies**

Catalog Number: 1524

Jon D. Levenson (Divinity School) 2264, Peter Machinist 2812, Lawrence E. Stager 1468, and D. Andrew Teeter (Divinity School) 6111

**Armenian Studies**

See also below under Armenian.

**For Undergraduates and Graduates**

[Armenian Studies 100. Armenian Epic]

Catalog Number: 2576

James R. Russell


Reading in translation of The Wild Men of Sasun, with analysis of native historical and mythological sources, and thematic comparison to epic poetry of the neighboring Iranians (Ossetic Narts, Persian Shah-nameh, Kurdish epic songs), Turks (Dede Korkut), and Greeks.
(Digenes Akrites).
Note: Expected to be given in 2013–14.

**Armenian Studies 102. Introduction to Armenian Civilization**
Catalog Number: 50965
James R. Russell
Half course (fall term). W., 3–5:30. EXAM GROUP: 8, 9
A survey of the history and culture of the Armenian people from earliest times to the Genocide and Soviet era.
Note: This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

Catalog Number: 3496
James R. Russell
A survey of the great innovators and visionaries: Bedros Tourian, Misak Medzarents, Yeghia Demirjianbeshian, Daniel Varouzhan, Siamanto, Vahan Teryan, Yeghishe Charents, and their English, Russian, and French colleagues and translators. The course spans the fateful epoch from the mid-19th century to the aftermath of the Russian Revolution.
Note: Expected to be given in 2013–14. Knowledge of Armenian preferred but not required.

**Graduate Courses of Reading and Research**

*Armenian Studies 300. Reading and Research in Armenian Studies*
Catalog Number: 1740
James R. Russell 3411

**Jewish Studies**

See also below under Aramaic, Hebrew, and Yiddish.

**Primarily for Undergraduates**

**Jewish Studies 80. American Jews and the Television Age**
Catalog Number: 84167
Rachel L. Greenblatt
Half course (spring term). Tu., Th., at 11; (F.), 9–12. EXAM GROUP: 13
Examines the involvement of Jews in American mass entertainment, especially television, during the twentieth century. At a time when Jews were active in both the business and creative ends of the new media that came to dominate fields as seemingly diverse as popular culture and political discourse, Jewish leading characters were largely absent from prime time network television. Are there relationships among Jewish involvement in mass entertainment, the simultaneous absence of Jewish characters onscreen, and the role of television in American culture?
Cross-listed Courses

[Aesthetic and Interpretive Understanding 29 (formerly Literature and Arts A-48). Modern Jewish Literature]

[Culture and Belief 13. The Contested Bible: The Sacred-Secular Dance]

Culture and Belief 27 (formerly Jewish Studies 55). Among the Nations: Jewish History in Pagan, Christian and Muslim Context

Ethical Reasoning 15 (formerly Moral Reasoning 54). “If There is No God, All is Permitted:” Theism and Moral Reasoning

[*History 70h. History and Memory]

*History 70k. Jewish History and the Question of Diaspora (with Rena Lauer) - (New Course)

*History 81f. Women’s Voices in Medieval and Early Modern Europe

For Undergraduates and Graduates

[Jewish Studies 103. Jewish Cultures in the Middle East]

Catalog Number: 46199
Susan M. Kahn

Half course (spring term). Tu., Th., 1–2:30.
An introduction to the cultural history of Jewish life in the Middle East. Provides an overview of the changing administrative contexts that historically governed the lives of minority populations in the Mamluk, Ottoman and Modern periods, and examines historical modes of Jewish community-building, strategies of survival, and cultural production in these settings. Finally, the course focuses on the diverse fates Middle Eastern Jewish communities in the 20th century. Readings will focus primarily on historical and anthropological accounts, though literary, cinematic and biographical sources will also be included.

Note: Expected to be given in 2013–14.

[Jewish Studies 129. Josephus]

Catalog Number: 93483
Shaye J.D. Cohen

Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
A survey of the works of Flavius Josephus, and of modern Josephan scholarship. Knowledge of Greek is desirable but not required.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1468.

[Jewish Studies 136. Jews and Greeks, Judaism and Hellenism]

Catalog Number: 65408
Shaye J.D. Cohen

Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
A study of the encounter between Judaism and Hellenism in antiquity, from the Hasmonean revolt until the emergence of Rabbinic Judaism. The course will focus on the land of Israel but some attention, for purposes of contrast, will also be paid to the diaspora. Themes: definitions of "Judaism" and "Hellenism," religious and philosophical resistance and accommodation, knowledge of Greek, literary forms, the "common culture" of Hellenistic near east, art and
architecture.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1461.

**Jewish Studies 138. The Synagogue and Jewish Community - (New Course)**
Catalog Number: 10321
Lee I. Levine (Hebrew University of Jerusalem)
*Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18*

The history and significance of the synagogue in antiquity during the first seven centuries of the common era. By examining both literary and archaeological sources, the course will address the place of the synagogue within the Jewish community as well as its liturgical dimensions, organization, leadership, art, and architecture.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1436.

**[Jewish Studies 139 (formerly History 1020). Jews and Judaism in the Ancient World]**
Catalog Number: 6035
Shaye J.D. Cohen
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*

A survey of Jewish history in antiquity from the Persian period (5th century BCE) to the Byzantine period (5th century CE). Topics include: political accommodation and resistance, Hellenism, the Hasmoneans and Herod the Great, the effects of Roman rule, Pharisees, Qumran, Christians, unity and diversity, the destruction of the temple and its aftermath, the emergence of rabbinic Judaism, homeland and diaspora.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1462.

**[Jewish Studies 149. Topics in the Dead Sea Scrolls: Exegesis at Qumran]**
Catalog Number: 54969
D. Andrew Teeter (Divinity School)
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*

This course explores the diverse functions of scripture within the literature of the Dead Sea Scrolls, focusing in particular on the forms and methods of interpretation attested, considered in light of other varieties of interpretation in early Judaism. Sessions will be devoted to reading, translation and discussion of primary sources in Hebrew, as well as to discussion of relevant secondary literature.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1309.

*Prerequisite:* Two years of Biblical Hebrew strongly recommended.

**Cross-listed Courses**

**[Literature 140. Literature and Politics]**

**Literature 153 (formerly Comparative Literature 153). Saul Bellow and the New York Intellectuals**

**Literature 163. Jewish Languages and Literature**

**[Literature 166 (formerly Comparative Literature 166). The Comic Tradition in Jewish Culture]**

**Literature 197. Secularism and its Discontents: From Agnon to Amichai - (New Course)**

**[Religion 1212a. Judaism: The Liturgical Year]**
### [Religion 1212b. Judaism: The Liturgical Year]

[Societies of the World 35. Conditional Equality: The Case of the Jews of Europe in Modern Times]

**Primarily for Graduates**

### *Jewish Studies 170. Job and the Problem of Suffering*

Catalog Number: 80691  
**Michael D. Coogan (Divinity School)**  
*Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11*

An examination of the book of Job and its poetic treatment of the human condition. The course will also consider other biblical and ancient Near Eastern texts that deal with the issue of evil in the world from a religious perspective, and later readings and retellings of Job by Frost, MacLeish, Wiesel, Fackenheim, and others.  
**Note:** Offered jointly with the Divinity School as 1106.

### [*Jewish Studies 200r. Guided Readings in Jewish History]*

Catalog Number: 4478  
**Shaye J.D. Cohen**  
*Half course (fall term). M., 1–3. EXAM GROUP: 6, 7*

Topic for 2010-11: Boundaries and Identities. Readings of Jewish texts, ancient to modern, that deal with the question of the Other and the Self: what is the boundary between Jews and non-Jews, and between Judaism and non-Judaism?  
**Note:** Expected to be given in 2013–14. Offered jointly with the Divinity School as 3709. Required of all entering graduate students in Jewish Studies; open to others with the permission of the instructor.

### Jewish Studies 201. Bible, Literature, Culture: The Song of Songs: Seminar - (New Course)

Catalog Number: 93844  
**Ilana Pardes (Hebrew University)**  
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*

The Song of Songs as a locus for reflection about love, both literal and allegorical. The Song of Songs in the writings of thinkers such as Herder, Rosenzweig, Alter, Fisch, Trible, and Kristeva. The reception of the Song of Songs, from Jewish and Christian allegorical readings to American literature and culture (from Whitman’s "Song of Myself" to Toni Morrison’s *Song of Solomon* and Israeli literature and culture (from Rachel Blustein’s "Locked Garden" to Daliah Rabikovitch’s "Intoxication").  
**Note:** Offered jointly with the Divinity School as 3657.

### [Jewish Studies 207. Rewriting Scripture in Jewish Antiquity: Seminar]

Catalog Number: 9572 Enrollment: Limited to 15.  
**D. Andrew Teeter (Divinity School)**  
*Half course (fall term). Tu., 4–6. EXAM GROUP: 18*

A study of the exegetical literature of so-called rewritten Bible texts from the Second Temple period, considered in relation to the received Hebrew Bible and its later interpretive traditions. Examination of exegetical techniques, aims, and presuppositions, with attention to higher level
compositional strategies, underlying conceptions of scripture/scriptural authority, and the dynamics of canon formation. Primary sources will include, among others: the book of Jubilees, the Temple Scroll, Reworked Pentateuch, the Genesis Apocryphon, as well as selected prophetic and hymnic exemplars.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1302.

Prerequisite: Ability to read (unpointed) Hebrew.

[Jewish Studies 215. Jewish Law from Qumran to the Mishnah: Seminar]
Catalog Number: 28993
Shaye J.D. Cohen

Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
The development of Jewish law in the period between the Bible and the Mishnah, with special attention to the Qumran scrolls. Topics include: the role of Scripture and the exegesis of Scripture; the "Oral Torah" and tradition; "common Judaism" and sectarianism; the Temple and the Temple calendar. No prerequisites; all texts read in translation.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3718.

Graduate Courses of Reading and Research

*Jewish Studies 300. Reading and Research in Jewish Studies
Catalog Number: 1544
Shaye J.D. Cohen 4180 (on leave spring term), Jay M. Harris 2266, Bernard Septimus 7160, and Ruth R. Wisse 3177 (on leave fall term)

Early Iranian Civilizations

For Undergraduates and Graduates

See also below under Arabic, Aramaic, and Iranian.

Histories and Cultures of Muslim Societies (Islamic Studies)

See also below under Arabic, Iranian, and Turkish.

Islamic Civilizations

Refer also to the Urdu section of the Department of South Asian Studies.

Primarily for Undergraduates

Cross-listed Courses

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]

*Religion 20. Ethnographies of Religion, Texts and Contexts

For Undergraduates and Graduates

**Islamic Civilizations 100. Supervised Reading and Research in Islamic Studies**
Catalog Number: 94225
Ali Asani and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
A course of supervised research in subjects related to the study of Islam and Muslim societies not treated in regular courses.

[Islamic Civilizations 103. Orientalism: Old and New Perspectives]
Catalog Number: 13124
Malika Zeghal
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
This course will look at the texts that inspired Said’s perspective in his 1978 book "Orientalism", in particular Foucault’s "Archeology of Knowledge" and "Discipline and Punish", and at the debates that have ensued within many disciplines such as history, sociology and cultural studies. Note: Expected to be given in 2013–14. Offered jointly with Divinity School as HDS 3358.

**Islamic Civilizations 145. Introduction to Islamic Philosophy and Theology**
Catalog Number: 0292
Khaled El-Rouayheb
Half course (fall term). Th., 3-5, and a weekly section to be arranged. EXAM GROUP: 17, 18
An introductory survey of the development of Islamic theology and philosophy. We will examine and discuss some of the central problems that were much debated through the centuries, such as: the relationship between philosophy and faith; whether humans possess free will; how to understand apparently anthropomorphic expressions in Scripture; whether acts are good because God commands them or God commands them because they are good; and proofs for the existence of God. Note: Offered jointly with the Divinity School as 3602.

[Islamic Civilizations 146. al-Ghazali: Theologian and Mystic]
Catalog Number: 9561
Khaled El-Rouayheb
Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18
Al-Ghazali (d.1111) is generally recognized to be one of the most influential of all Muslim religious thinkers. A prominent theologian and jurist, he experienced a spiritual crisis at the height of his career, and as a consequence explored mysticism (Sufism) and worked out a powerful synthesis between respect for the externals of the Islamic religion and the mystics’ stress on the interior life. In this course, we will look in particular at his account of his spiritual crisis; his critical engagement with the Islamic Philosophers; and some of the more mystical works that he wrote toward the end of his life, including his theodicy, his meditations on the Qur’anic dictum that "God is the Light of the Heavens and the Earth", and select chapters from
his great summa "The Revival of the Religious Sciences". All readings will be in English.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3599.

Prerequisite: No knowledge of Arabic required.

**Islamic Civilizations 170. Islam, Modernity and Politics - (New Course)**

Catalog Number: 55905 Enrollment: Limited to 18.

Ousmane Oumar Kane

Half course (spring term). F., 2–4. EXAM GROUP: 7, 8

21st centuries. Attention will be devoted to the patterns of interaction between the Muslim World and the West because it is our assumption that these patterns contribute to influence ideological formations and modes of religious/political mobilizations in the Muslim World. By the end of the eighteenth century, much of the Muslim World was in "decline" whereas European imperial powers, mainly France and Great Britain, were on the rise. The course will explore the response of Muslim societies and intellectuals to the rise of European prominence. The major 19th century reformist movements that appeared in the Muslim World will be discussed, ranging from movements advocating mild reform to those rejecting all influence of "Western civilization" and advocating a return to the Tradition of Muhammad. In the twentieth century, virtually all the Muslim World came under European colonial domination. During colonial rule and after, the Muslim world experienced major transformations which affected the nature and administration of law, politics and society. It is in this context, that the new Islamic revival that some have called "Islamism" was articulated as an alternative to Westernization. The course will address the rise of contemporary "Islamism," as an alternative to Western domination and modernization/Westernization. The major theorists of political Islam as well as the different trajectories of "Islamism" in diverse Muslim societies will be covered. The impact of political Islam in the West will also be addressed. The final part of the course will assess the trajectories of political Islam and address the ongoing debates on post-Islamism, secularism and modernity.

Note: Offered jointly with the Divinity School as 3368.

**Islamic Civilizations 175. Islam in African History - (New Course)**

Catalog Number: 15502 Enrollment: Limited to 30.

Ousmane Oumar Kane

Half course (spring term). Tu., Th., at 1. EXAM GROUP: 15

As of 2009 according to the Pew Charitable Trust Survey of the Global Muslim population, 241 million Muslims lived south of the Sahara. This is about 15 percent of the Muslim global population. The course is designed to provide an understanding of the spread of Islam and the formation and transformation of Muslim societies in Sub-Saharan Africa. The course is organized in two parts. The first part of the course will focus on the history of Islamization of Africa, and topics will include the ways in which Islam came to Africa, the relationships of Islam to trade, the growth of literacy in Arabic and Ajami, the rise of clerical classes and their contribution to State formation in the pre-colonial period. The second part of the course will address Muslim responses to European colonial domination, and the varieties of Islamic expressions in the post independence period (rise of Islamist, Shiite and Salafi jihadi movements) and Muslim globalization. The course format consists of two weekly meetings of 1.30 minutes each. In addition to lectures, the course will include film showing and discussion.

Note: Offered jointly with the Divinity School as 3365.
[Islamic Civilizations 180. Contemporary Islam: Texts and Contexts]
Catalog Number: 28231
Malika Zeghal
Half course (fall term). W., 1–3. EXAM GROUP: 6, 7
The course will examine ten important works in the social sciences and humanities on contemporary Islam published from the 1960s to the present day. We will pay attention to the contexts in which they were published and will analyze the conceptual assumptions that are at the foundation of these works.
Note: Expected to be given in 2013–14.

[Islamic Civilizations 183. Reform and Revival in Modern Islam, 19th -20th centuries]
Catalog Number: 15829
Malika Zeghal
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
This course will shed light on the historical transformation of the internal religious reforms of Islam in the 18th and 19th century into politicized and/or fundamentalist versions of Islam in the 20th century.
Note: Expected to be given in 2013–14. Offered jointly with Divinity School as HDS 3362.

Islamic Civilizations 185. Ulama, Religious Institutions, and Islamic Education in the Middle East
Catalog Number: 73552
Malika Zeghal
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Examines the recent historiography and sociology of religious education and religious scholars (’ulama) in the Muslim world. (19th-20th centuries).

Cross-listed Courses

History 1877a (formerly History 1877). History of the Near East, 600-1055
[History 1877b (formerly *History 78b). History of the Near East, 1055-1500: Conference Course]
[History 1878b. Ottoman State and Society II (1550-1920)]
History of Art and Architecture 128. Topics in Arabic Art and Culture: The Medieval Mediterranean
History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
[History of Science 111. Two Scientific Revolutions: From the Classical Age of Islamic Sciences to the Scientific World of Early Modern Europe]
History of Science 113. Crusades, Plagues and Hospitals: Medicine and Society in the Islamic Middle Ages
Religion 1832. Political Islam in the 20th and 21st Centuries

Primarily for Graduates

Islamic Civilizations 220. The Social and Cultural Lives of Islamic Law - (New Course)
Catalog Number: 82565

1065
M. Shahab Ahmed
Half course (fall term). W., 7–9 p.m. EXAM GROUP: 9
This course seeks to understand Islamic law as a part of the larger cultural life of Muslim society. We will take as an exemplary case-study the most powerful Muslim society in history: namely, Ottoman society in the sixteenth and seventeenth centuries. Two prominent heresy trials (one of a professor of philosophical theology, the other of a madrasah-graduate turned business tycoon) will be studied as the means to open up the question of the relationship of Islamic law to social and cultural norms at large. The course will examine the Ottoman-Muslim understanding of the relationship of the law to intellectual discourses such as philosophy and Sufism that subordinated the law to their respective cosmologies, as well its relationship to social practices such as wine-drinking and figural painting that were practiced with regularized impunity despite the fact that they violated legal norms, as well to canonical forms of self-expression and communication such as poetry and moral tales assertive of ethical values that tempered or marginalized the law. In this way, we will treat subjects such as freedom of expression, public and private, ethics and morality, education, social hierarchy, literary self-statement, political theory, executive and judiciary, so as to understand how Muslims conceived of the law and its authority and function in relation to other discourses and practices that made alternative claims about the constitution of Islamic norms. Students will be evaluated on the basis of a research/responsive paper.
Note: Offered jointly with Harvard Law School as 2517.

*Islamic Civilizations 221. Does the Fiqh Know a Concept of Natural Law? - (New Course)*
Catalog Number: 40535 Enrollment: Limited to 10.
Baber Johansen (Divinity School)
Half course (spring term). M., 4–6. EXAM GROUP: 9
The first four sessions of the seminar will discuss different Natural Law concepts, from the Stoics to modern rational natural law. The rest of the seminar will be dedicated to the reading of usul al-fiqh texts dating from the 11th to the 17th centuries. These texts will be compared to our readings on Natural Law.
Note: Offered jointly with the Divinity School as 3592.

*Islamic Civilizations 223. The Islamic Ritual’s Influence on the Legal Reasoning of the Fiqh - (New Course)*
Catalog Number: 55642 Enrollment: Limited to 12.
Baber Johansen (Divinity School)
Half course (fall term). M., 4–6. EXAM GROUP: 9
From the end of the 19th until the last decade of the 20th century, Western research has excluded the ritual duties (’ibadat) from the study of "Islamic Law". It is only since the 1980s that increased attention has been given to the normative character of the ritual. This seminar focuses on the influence that the legal construction of the ritual has had on the fiqh’s forms of legal reasoning in general. It will, in particular, study the concept of obligation in the ritual and other parts of the fiqh. It will also draw attention to the fact that the ritual has always been and continues to be one of the most important forms in which Islamic Law is present in Muslim societies.
Note: Offered jointly with the Divinity School as 3584.
Islamic Civilizations 225. Islam, Metaphor, Meaning - (New Course)
Catalog Number: 32524
M. Shahab Ahmed
Half course (spring term). M., 5–7 p.m. EXAM GROUP: 9
This course examines the hermeneutical significance of the non-literal/figurative in Islamic history. How have Muslims conceptualized, created, received, used, identified and interpreted domains, texts and images in terms of literal and non-literal expression, and with what consequences for the production of meaning in terms of Islam?
Note: Not open to auditors. Jointly offered with the Divinity School as 3631

*Islamic Civilizations 241r. Approaches to Studying Indo-Muslim Culture and South Asian Islam
Catalog Number: 7515
Ali S. Asani
Half course (fall term; repeated spring term). Hours to be arranged.
A seminar for graduate students focusing on current scholarship on Islamic civilization in South Asia.
Note: Open to undergraduates with a background in Islamic or South Asian studies.
Prerequisite: Introductory coursework on Islam, Religion 1820 or equivalent.

Cross-listed Courses

[History 2884. Topics in Ottoman Social and Cultural History: Seminar]
[History 2886. Topics in Islamic History: Seminar]
History of Science 209. Science, Religion and Culture: Debates, Methods and Controversies

Graduate Courses of Reading and Research

*Islamic Civilizations 300. Reading and Research in Islamic Civilizations
Catalog Number: 1963
M. Shahab Ahmed 5273, Ali S. Asani 7739, Khaled El-Rouayheb 5536, William Albert Graham 4156 (on leave 2012-13), William E. Granara 1054, Wolfhart P. Heinrichs 4988 (on leave spring term), and Malika Zeghal 6744 (fall term only)

Modern Middle Eastern Studies

Primarily for Undergraduates

*The Modern Middle East 91r. Supervised Reading and Research - (New Course)
Catalog Number: 88561
Ali S. Asani, William E. Granara, Susan M. Kahn, Malika Zeghal and members of the Department.
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research in subjects not treated in regular courses.

Cross-listed Courses
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]

*History 78e. Cities and Borderlands in the History of the Modern Middle East - (New Course)

*History 82m. The Modern Mediterranean: Connections and Conflicts between Europe and North Africa - (New Course)

*History 88c. Modern Iraq in the Media and in Historical Perspective - (New Course)

Societies of the World 46 (formerly Anthropology 1621). The Anthropology of Arabia

For Undergraduates and Graduates

The Modern Middle East 100 (formerly Near Eastern Civilizations 100). Approaches to Middle Eastern Studies
Catalog Number: 12411
Susan M. Kahn
Half course (fall term). Tu., Th., at 1. EXAM GROUP: 15
An interdisciplinary introduction to Middle Eastern Studies focusing on the modern period. Disciplinary approaches will include exemplary texts in History, Anthropology, Religious Studies, Literature and Political Science. Required for all concentrators in The Modern Middle East. Open to all undergraduates.
Note: A required course primarily for undergraduates pursuing a secondary field in modern Middle Eastern Studies.

The Modern Middle East 105 (formerly Near Eastern Civilizations 105). Peoples and Societies of the Middle East] - (New Course)
Catalog Number: 11698
Susan M. Kahn
Half course (spring term). Hours to be arranged.
This course is an introduction to the peoples and societies of the Middle East focusing on the following areas: Islam as Culture, Family and Kinship, Communal Identities, Gender, Youth Culture and Ethnic and Religious Minorities. The course examines the varieties of cultural experiences in the Middle East through close reading of ethnographic texts, memoirs, and primary historical sources.
Note: Expected to be given in 2013–14.

The Modern Middle East 111 (formerly Islamic Civilizations 105). Culture and Society in Contemporary Iran
Catalog Number: 51277
Chad Kia
Half course (spring term). M., W., at 1, plus weekly section to be arranged. EXAM GROUP: 6
Introduces a wide spectrum of students to some of the most significant aspects of Iranian culture from the Constitutional Revolution through the three decades since the Islamic Revolution of 1979, one of the paradigmatic shifts in twentieth-century global history. Using the modernist commitment of artists and intellectuals to social and political engagement as a unifying theme, the course will survey modern and contemporary Iranian culture through the analysis of various literary, artistic, cinematic, and intellectual forms. The impact of European culture; nationalism;
the tensions between modernism, secularism, and religion; the emergence of women’s voices, a cinematic avant-garde, and mass culture; the strains of cosmopolitan and provincial coexistence; the anti-Western critique of "occidentosis" are among the issues that will be addressed.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Foreign Cultures.

**The Modern Middle East 115. The Arab-Zionist conflict, 1882-1948 - (New Course)**

Catalog Number: 64675  
Benny Morris  
*Half course (spring term). Tu., Th., at 11; EXAM GROUP: 13*

A survey of the conflict between the native Arab population of Palestine and the incoming Zionist settlers, from the first wave of Jewish immigration in 1882 until the outbreak of the First Arab-Israeli war in 1948. Topics include: mutual Arab and Zionist perceptions; the causes of friction and violence; the impact of the First World War, the post-war settlement, Arab attacks on the settlers (1920, 1921 and 1929), the Arab Revolt of 1936-1939, the impact of the second World War, and the countdown to the Arab-Israeli War of 1948.

**The Modern Middle East 120. The Arab Revolutions: popular uprisings and political transformations - (New Course)**

Catalog Number: 34461  
Malika Zeghal  
*Half course (fall term). W., 1–3; EXAM GROUP: 6, 7*

Examines the causes of the 2010-2011 Arab uprisings, the subsequent political transformations in the Middle East and North Africa and the prospects for democratic transitions.

[The Modern Middle East 158 (formerly Arabic 158). Modern Arabic Literature Seminar: Lebanese Civil War in Fiction]

Catalog Number: 5145  
William E. Granara  
*Half course (fall term). W., 4–6. EXAM GROUP: 9*

Examines the roots and issues of the Lebanese Civil War (1975-90) and its enormous impact on modern Arabic fiction. The syllabus pairs realistic and romanticized representations of family, sectarian, and gender binaries against the destruction and fantasy of the urban landscape. Themes include nostalgia and memory, exile and return. Films and documentaries will also be viewed.

*Note:* Expected to be given in 2013–14. Arabic helpful but not required. Open to both undergraduates and graduates.

[The Modern Middle East 160r (formerly Turkish 160r). History of Modern Turkey through Literature]

Catalog Number: 6964  
Himmet Taskomur  
*Half course (spring term). M., W., at 12, and an additional hour to be arranged. EXAM GROUP: 5*

This course surveys the history of modern Turkey and culture through Turkish literature in translation. Main focus is on topics of cultural revolution, nationalism, identity, gender, and migration. Primary readings are translations of novels, short stories, drama and poetry.
Note: Expected to be given in 2013–14. Knowledge of Turkish not required. Not open to auditors.

The Modern Middle East 162 (formerly Arabic 162). Introduction to the Modern Arab World I
Catalog Number: 5643
William E. Granara and Members of the Department
Half course (fall term). M., W., 10 and additional hour to be arranged. EXAM GROUP: 3
A survey of significant events and issues in the modern Arab world from the later years of the Ottoman Empire to the eve of WWI. Topics include the Arab renaissance, the challenges of modernity, reformist movements, colonialism, and the emergence of the modern nation states. Note: No knowledge of Arabic required, but bilingual sectioning will be provided for students who select to read primary sources either in Arabic or English. Offered jointly with the Divinity School as 3623.

The Modern Middle East 170 (formerly Arabic 170). Introduction to the Arab World II: Politics, Religion, and Culture from World War I to Present
Catalog Number: 9471
William E. Granara and members of the Department
Half course (spring term). M., W., at 10, and an additional hour to be arranged. EXAM GROUP: 3
The course examines the major intellectual, political and sociocultural trends in the Arab world, from the anti-colonial struggle to self-determination. Topics include Arab nationalism, political reform, cultural production, economic development, and the emergence of the Arabian Gulf. Note: Bi-lingual sectioning will be provided for students who select to read primary sources either in Arabic or English. Offered jointly with the Divinity School as 3626. This course, when taken for a letter grade, meets the Core area requirement for Historical Study A.

[The Modern Middle East 175r (formerly Arabic 175r). Understanding Modern North Africa]
Catalog Number: 69851
William E. Granara
Half course (spring term). M., W., at 12. EXAM GROUP: 5

Cross-listed courses

History 1888. The Modern Persian Gulf Region: Politics, Economy and Society - (New Course)

Primarily for Graduates
The Modern Middle East 200a (formerly Near Eastern Civilizations 200a). Approaches to Middle Eastern Studies

Catalog Number: 5918
Susan M. Kahn and members of the Faculty
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Interdisciplinary seminar serves as an introduction to the major disciplines constituting Middle Eastern Studies, including history, political science, anthropology, literature and Islamic Studies. Faculty affiliated with Center for Middle Eastern Studies serve as guest lecturers.
Note: Required for students pursuing the AM in Middle Eastern Studies. Primarily for first-term students in the AM in Middle Eastern Studies program, although open to Graduate students in related fields.

The Modern Middle East 215. The Arab-Israeli War of 1948 - (New Course)

Catalog Number: 49568
Benny Morris
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
This seminar will treat in depth the Arab-Israeli War of 1948 on the basis of contemporary documentation, British American, UN, and Israeli. Topics include: the UN partition resolution of November 1947 and its diplomatic background; the civil war between the Arab and Jewish communities in Palestine; the invasion by the armies of the Arab states in May 1948; the consequences of the war.

*The Modern Middle East 220. The Spring of 2011 in the Middle East - (New Course)

Catalog Number: 92057 Enrollment: Limited to 20.
Baber Johansen (Divinity School)
Half course (spring term). W., 4–6. EXAM GROUP: 9
The course will give an overview of the events of the Middle Eastern Spring of 2011 and will discuss the forms of communication, their content and their use of cultural and technological resources by those who insisted on regime change.
Note: Offered jointly with the Divinity School as 3588.

Graduate Courses of Reading and Research

*The Modern Middle East 300. Direction of Master’s Thesis - (New Course)

Catalog Number: 37039
Ali S. Asani 7739, William E. Granara 1054, Baber Johansen (Divinity School) 5295, Susan M. Kahn 4833, and Malika Zeghal 6744

Akkadian and Sumerian

See also above under Ancient Near Eastern and Biblical Studies.

Akkadian

For Undergraduates and Graduates
Akkadian A. Beginning Babylonian
Catalog Number: 4891
Anne Löhnert
Full course (indivisible). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An introduction to the Old Babylonian dialect of Akkadian, which was used during the time of Hammurabi. Students learn the fundamentals of grammar and the writing system, and the most common cuneiform signs in both the lapis and cursive scripts. Passages from the Code of Hammurabi and the Epic of Gilgamesh, among other texts, are read over the course of the year.

Akkadian 120. Intermediate Babylonian
Catalog Number: 3724
Piotr Steinkeller
Full course (indivisible). Tu., 1–4. EXAM GROUP: 15, 16, 17
Prerequisite: Akkadian grammar, basic vocabulary, knowledge of cuneiform script.

[Akkadian 141r (formerly Ancient Near East 141r). Akkadian Myths and Epics]
Catalog Number: 7618
Peter Machinist
Half course (full term). Tu., 1–3. EXAM GROUP: 15, 16
Examination of selected Assyrian and Babylonian myths and epics from the latter second and first millennia B.C.
Note: Expected to be given in 2014–15.
Prerequisite: Akkadian grammar, basic vocabulary, knowledge of cuneiform script.

[Akkadian 144. Akkadian Divination Texts]
Catalog Number: 6734
Piotr Steinkeller
Half course (fall term). W., 1–4. EXAM GROUP: 6, 7, 8
Note: Expected to be given in 2013–14.

[Akkadian 149. Akkadian Legal and Economic Texts]
Catalog Number: 6703
Instructor to be determined
Half course (fall term). Tu., Th., 1:30–3. EXAM GROUP: 15, 16
Note: Expected to be given in 2013–14.
Prerequisite: Akkadian grammar, basic vocabulary, knowledge of cuneiform script.

Akkadian 153. Old Akkadian
Catalog Number: 8334
Piotr Steinkeller
Half course (full term). Th., 1–4. EXAM GROUP: 15, 16, 17
Readings in representative historical, epistolary, literary, and economic texts with emphasis on the grammar.
Prerequisite: Akkadian grammar, basic vocabulary, knowledge of cuneiform script.
[Akkadian 154a. Peripheral Akkadian]
Catalog Number: 2416
Instructor to be determined
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.
Prerequisite: Two full courses in Akkadian.

*Akkadian 156. Neo-Babylonian Inscriptions*
Catalog Number: 4024
Anne Löhnert
Half course (spring term). Hours to be arranged.
Focuses on juridical aspects of every-day life in 1st millennium BCE Babylon. Reports of legal cases, letters and contracts allow vivid insights into interactions between persons and enhances their sometimes moving biographies. Explores the fates of murderers, thieves, slaves and foundlings; characteristics of legal decision-making bodies and the royal interventions in private law will be discussed.
Note: Expected to be omitted in 2013–14.
Prerequisite: Akkadian grammar, basic vocabulary, knowledge of cuneiform script.

Primarily for Graduates

Akkadian 200r. Readings in Akkadian: Seminar
Catalog Number: 2970
Piotr Steinkeller
Half course (spring term). Hours to be arranged.

Graduate Courses of Reading and Research

*Akkadian 300. Akkadian Language and Literature*
Catalog Number: 2233
Peter Machinist 2812 and Piotr Steinkeller 7337

Sumerian

For Undergraduates and Graduates

[Sumerian A. Elementary Sumerian]
Catalog Number: 5260
Piotr Steinkeller
Full course (indivisible). Hours to be arranged.
Introduction to the Sumerian language with emphasis on grammatical structure.
Note: Expected to be given in 2013–14.

[Sumerian 120. Intermediate Sumerian]
Catalog Number: 7399
Piotr Steinkeller and assistant
Full course (indivisible). Hours to be arranged.
Note: Expected to be given in 2013–14.
Prerequisite: Knowledge of basic Sumerian grammar, vocabulary, and cuneiform script.

**Sumerian 140. Sumerian Historical Texts** *(New Course)*
Catalog Number: 35916
Piotr Steinkeller
*Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17*

**Sumerian 141. Sumerian Myths and Epics**
Catalog Number: 9858
Piotr Steinkeller
*Half course (fall term). Hours to be arranged.
Note: Expected to be given in 2013–14.*

**Sumerian 145. Sumerian Incantations and Rituals**
Catalog Number: 5259
Piotr Steinkeller
*Half course (fall term). W., 1–4. EXAM GROUP: 6, 7, 8*

**Sumerian 146. Sumerian Religious Literature**
Catalog Number: 2605
Instructor to be determined
*Half course (fall term). Hours to be arranged.
Note: Expected to be given in 2013–14.*

**Sumerian 149. Sumerian Legal and Economic Texts**
Catalog Number: 8820
Instructor to be determined
*Half course (spring term). Tu., 1–4. EXAM GROUP: 15, 16, 17
Note: Expected to be given in 2013–14.*

**Primarily for Graduates**

**Sumerian 200r. Readings in Sumerian: Seminar**
Catalog Number: 7496
Piotr Steinkeller
*Half course (spring term). Hours to be arranged.*

**Graduate Courses of Reading and Research**

**Sumerian 300. Sumerian Language and Literature**
Catalog Number: 7912
Piotr Steinkeller 7337

**Cross-listed Courses**
2012-2013 Previous Courses of Instruction

[Linguistics 225a. Introduction to Hittite]

Arabic

See also Islamic Civilizations.

Primarily for Undergraduates

Cross-listed Courses

[*Literature 131. The Arab-American Experience in Fiction, Film, and Popular Culture - (New Course)]

For Undergraduates and Graduates

Arabic A. Elementary Arabic
Catalog Number: 5773
Paul Herbert Wulfsberg and staff
Full course (indivisible). M., through F., at 9, 10, 11, or 12. EXAM GROUP: 2, 11
Introduces students to the phonology and script of classical/modern standard Arabic and covers the basic morphology and syntax of the written language. Emphasis on the development of the four skills (reading, speaking, listening, and writing). Samples of modern (contemporary) and classical styles of writing introduced into basic syllabus, and audio-visual material from the contemporary Arabic media. Textbook: Ahlan Wa Sahlan (the set).
Note: Not open to auditors. Cannot be taken pass/fail. Cannot divide for credit. Offered jointly with the Divinity School as 4345.

Arabic Ba (formerly Arabic 120a and 121a). Intermediate Arabic I
Catalog Number: 1106
William E. Granara and staff
Half course (fall term). M. through F., at 10, 11, or 12. EXAM GROUP: 3, 12
A thorough review and continuation of literary (classic and modern) Arabic grammar with emphasis on reading, writing, speaking and listening comprehension. Course materials draw from both classical and modern Arabic literature and culture.
Note: Not open to auditors. Cannot be taken pass/fail. Offered jointly with the Divinity School as 4351.
Prerequisite: Arabic A or equivalent.

Arabic Bb (formerly Arabic 120b and 121b). Intermediate Arabic II
Catalog Number: 0973
William E. Granara and staff
Half course (spring term). M., through F., at 10, 11, or 12. EXAM GROUP: 3, 12
Note: Not open to auditors. Cannot be taken pass/fail. Offered jointly with the Divinity School as 4361.
Prerequisite: Arabic A or equivalent.
Arabic 130a. Upper-Level Classical Arabic I
Catalog Number: 4591
Khaled El-Rouayheb
Half course (fall term). Tu., Th., 11:30–1 and additional hour to be arranged. EXAM GROUP: 13, 14
Concentration on readings from classical Islamic texts, with emphasis on Qur’an, hadîth, sîra, and tafsîr literature; directed readings and textual analysis; review of classical Arabic morphology and syntax.
Note: Not open to auditors. Offered jointly with the Divinity School as 4353.
Prerequisite: Arabic Ba or equivalent, or may be taken separately with permission of the instructor.

Arabic 130b. Upper-Level Classical Arabic II
Catalog Number: 2964
Khaled El-Rouayheb
Half course (spring term). Tu., Th., 11:30–1 and additional hour to be arranged. EXAM GROUP: 13, 14
Continuation of Arabic 130a or may be taken separately with permission of the instructor.
Readings from corpus of "Adab" (Belles-Lettres) literature, as well as various pieces of classical Arabic poetry.
Note: Not open to auditors. Offered jointly with the Divinity School as 4354.
Prerequisite: Arabic 130a or equivalent, or may be taken separately with permission of the instructor.

Arabic 131a. Upper-Level Modern Arabic I
Catalog Number: 0739
Nevenka Korica-Sullivan
Half course (fall term). Section I: M. through Th., at 11; Section II: M. through Th., at 12. EXAM GROUP: 5, 14
Reading and discussion of selections from Arabic newspapers and journals on contemporary political, social, religious, and cultural issues in the Arab world. Emphasis on developing advanced reading and speaking skills, with some attention to writing and listening comprehension. Textbook: Al-Kitaab, volume III.
Note: Not open to auditors.
Prerequisite: Arabic Ba or equivalent.

Arabic 131b. Upper-Level Modern Arabic II
Catalog Number: 0697
Nevenka Korica-Sullivan
Half course (spring term). Section I: M. through Th., at 11; Section II: M. through Th., at 12. EXAM GROUP: 4, 13
A continuation of Arabic 131a or may be taken separately with permission of the instructor.
Continued emphasis on advanced reading and speaking skills, and introduction to contemporary Arabic fiction, with emphasis on short stories and essays. Textbook: Al-Kitaab, volume III.
Note: Not open to auditors.
Prerequisite: Arabic 131a or equivalent.
Arabic 132. Advanced Composition and Grammar Review - (New Course)  
Catalog Number: 74782 Enrollment: Limited to 12.  
Nevenka Korica  
Course introduces students to the stylistics of Arabic composition while reinforcing complex morphological and syntactic structures.  
Note: Not eligible for language citation.  
Prerequisite: Two years of Modern Standard Arabic or equivalent.

Arabic 133. Upper-Level Spoken Modern Standard Arabic  
Catalog Number: 4747 Enrollment: Limited to 15.  
William E. Granara and staff  
Half course (fall term). M., W., 3–5. EXAM GROUP: 8, 9  
This course emphasizes the development of advanced speaking and listening skills by exposing students to the contemporary media and academia. Some reading and writing will be required, but classes will revolve around oral presentations and directed conversations.  
Note: Not open to auditors.  
Prerequisite: Two years of MSA or equivalent proficiency.

Arabic 134. Colloquial Levantine Arabic  
Catalog Number: 4154 Enrollment: Limited to 12.  
Nour Barmada abida  
Half course (spring term). M., W., 3–5. EXAM GROUP: 8, 9  
Introduces students to Colloquial Levantine Arabic of Lebanon, Syria, Jordan, and Israel/Palestine. The course emphasizes the development of speaking and listening skills through the reinforcement of grammar and vocabulary.  
Note: Not open to auditors. Students who have completed Arabic 135 may not take this course for credit.  
Prerequisite: Two years of Standard Arabic or the equivalent.

[Arabic 135. Colloquial Egyptian Arabic]  
Catalog Number: 4454 Enrollment: Limited to 12.  
Nevenka Korica-Sullivan  
Half course (spring term). M., W., 3–5. EXAM GROUP: 8, 9  
Introduces students to Egyptian Arabic, the most widely recognized dialect in the Arab world. The course emphasizes the development of speaking and listening skills through the reinforcement of grammar and vocabulary.  
Note: Expected to be given in 2013–14. Not open to auditors. Students who have completed Arabic 134 may not take this course for credit.  
Prerequisite: Two years of Standard Arabic or the equivalent.

Arabic 150r. History of Classical Arabic Literature: Seminar  
Catalog Number: 7759  
William E. Granara  
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8  
Overview of Classical Arabic literature, including reading and discussion of selected texts.
Note: Knowledge of Arabic advantageous but not required. An additional hour may be set aside for reading in the originals.

**Arabic 160r. Readings in Arabic Historians, Geographers, and Biographers**  
Catalog Number: 5617  
Roy Mottahedeh  
*Half course (fall term). W., 4–6. EXAM GROUP: 9*

**Arabic 172 (formerly Arabic 175). Urban Landscapes: The City and Contemporary Arabic Literature and Culture**  
Catalog Number: 81999  
William E. Granara and Salim Tamari (Birzeit University)  
*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*  
This course examines the roles and images of the modern city as major themes in contemporary Arabic literature and culture.  
*Prerequisite: Open to undergraduate and graduate students.*

**Primarily for Graduates**

**Arabic 240a. Classical Arabic Philology**  
Catalog Number: 5920  
Wolfhart P. Heinrichs  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*  
Arabic philology, including discussion of difficult grammatical problems and an introduction to manuscript and editorial work.

[**Arabic 240b. Classical Arabic Philology: The Religious Disciplines**]  
Catalog Number: 68728  
Wolfhart P. Heinrichs  
*Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17*  
Arabic philology, including discussion of difficult grammatical problems and readings from the religious disciplines.  
*Note: Expected to be given in 2013–14.*

**Arabic 241ar. Advanced Modern Arabic Bridge: Language, Literature, and Culture I**  
Catalog Number: 3309  
William E. Granara and staff  
*Half course (fall term). Tu., Th., 11:30-1, and an additional hour to be arranged. EXAM GROUP: 13, 14*  
This constitutes the final year of Modern Arabic track. Representative readings from contemporary literature and culture will form bases of discussions on major themes in contemporary Arab society.  
*Note: Conducted in Arabic. Not open to auditors.  
Prerequisite: Advanced proficiency in Arabic.*
Arabic 241br. Advanced Modern Arabic Bridge: Language, Literature, and Culture II
Catalog Number: 6399
Sami Mohmoud Alkyam
Half course (spring term). Tu., Th., 11:30-1, and an additional hour to be arranged. EXAM GROUP: 13, 14
A continuation of Arabic 241ar.
Note: Conducted in Arabic. Not open to auditors.

*Arabic 242ar. Arabic Five - (New Course)
Catalog Number: 44568 Enrollment: Limited to 12.
William E. Granara
Half course (fall term). Hours to be arranged.
The Arabic short story: traditions and subversions.
Note: Course conducted solely in Arabic; all readings in Arabic. Organizational Meeting: Thursday, Sept 6th, 4:00 pm, Center for Middle Eastern Studies, 38 Kirkland Street, Room 208.
Prerequisite: Four years of Modern Arabic or equivalent.

*Arabic 242br. Arabic Five - (New Course)
Catalog Number: 59675 Enrollment: Limited to 12.
William E. Granara and Salim Tamari (Birzeit University)
Half course (spring term). Hours to be arranged.
Writing self and other: (auto)biographies and the formation of modern identities.
Note: Course conducted solely in Arabic; all readings in Arabic.
Prerequisite: Four years of Modern Arabic or equivalent.

[Arabic 245r. Classical Arabic Literature: Seminar]
Catalog Number: 4854
Maher Jarrar (American University of Beirut)
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
A survey of belle-lettres, from the early proponents of the 'adab' movement to selected tales from Arabian Nights. Texts include manuals for kings and professionals, etiquette, and amorous liaisons. Authors included: Ibn Hazm, Al-Jahiz, and al-Tawhidi, etc.
Note: Expected to be given in 2013–14.
Prerequisite: Reading knowledge of Arabic.

[Arabic 246r. Andalus, Sicily, and the Maghrib in Literary and Cultural Texts: Seminar]
Catalog Number: 6196
William E. Granara
Half course (spring term). Hours to be arranged.
Literary and historical texts of the Arabo-Islamic cultures of Spain (al-Andalus), Sicily, and North Africa. Examines the emergence of a "Maghribi" identity amidst cross-cultural relations with the Christian North and the Muslim East.
Note: Expected to be given in 2013–14.
Prerequisite: Three years of Arabic, or permission from the instructor.
[Arabic 248a. Medieval Arabic Writings on Grammar]
Catalog Number: 1440
Wolfhart P. Heinrichs
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Introduction to the study of the medieval Arabic disciplines dealing with literature. Discussion of selected topics on the basis of text readings and recent secondary literature.
Note: Expected to be given in 2013–14.
Prerequisite: Reading knowledge of Arabic.

[Arabic 248b. Medieval Arabic Writings on Literary Theory]
Catalog Number: 38514
Wolfhart P. Heinrichs
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Introduction to the study of the medieval Arabic disciplines dealing with literature. Discussion of selected topics on the basis of text readings and recent secondary literature.
Note: Reading knowledge of Arabic.

[Arabic 249r. Arabic Philosophical Texts: Seminar]
Catalog Number: 3572
Khaled El-Rouayheb
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
An introduction to Arabic Logic.
Note: Expected to be given in 2013–14.
Prerequisite: Three years of Arabic or equivalent.

[Arabic 250r. Islamic Theological Texts]
Catalog Number: 7849
Khaled El-Rouayheb
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
"Free Will" and Divine Predestination in Islamic Theology. One of the most intensely debated issues in the long history of Islamic rational theology (kalām) was how to reconcile our human sense of being free agents who are responsible for our voluntary acts with divine omnipotence and predestination. This seminar will offer a sample of some of the more influential contributions to the topic by prominent Islamic theologians from the 11th to the 19th centuries belonging to various theological schools: Ash‘arī, Māturīdī, Mu‘tazilī, Hanbalī, Sufi and Imāmī Shī‘ī.
Note: Offered jointly with the Divinity School as 3883.
Prerequisite: Three years of Arabic or the permission of the instructor. Students will be expected to read approximately 15-20 pages of classical Arabic per week.

Cross-listed Courses

Comparative Literature 263. Journey, Exile, and Displacement in Modern Arabic Literature

Graduate Courses of Reading and Research
*Arabic 300. Reading and Research in Arabic Language and Civilization  
Catalog Number: 7828  
_M. Shahab Ahmed 5273, Khaled El-Rouayheb 5536, William Albert Graham 4156 (on leave 2012-13), William E. Granara 1054, Wolfhart P. Heinrichs 4988 (on leave spring term), Baber Johansen (Divinity School) 5295, and Roy Mottahedeh 1454 (on leave spring term)*

*Arabic 320. Reading and Research in Modern Arabic Literature and Literary Criticism  
Catalog Number: 9167  
William E. Granara 1054

Aramaic

_for undergraduates and graduates_

See also Ancient Near East and Biblical Studies, Jewish Studies, and Early Iranian Civilizations.

[Aramaic A. Introduction to Ancient Aramaic]
Catalog Number: 5985  
_Instructor to be determined_  
_Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_  
Introduction to the ancient Aramaic dialects, including Biblical Aramaic, Imperial Aramaic from Egypt, and Palestinian Aramaic.  
_Note:_ Expected to be given in 2013–14.  
_Prerequisite:_ two semesters of Biblical Hebrew.

[Aramaic B. Targumic and Related Aramaic]
Catalog Number: 89499  
_Instructor to be determined_  
_Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_  
Readings in Egyptian, Palestinian and targumic Aramaic, with special focus on the grammar, literary form and function of the Targumim.  
_Note:_ Expected to be given in 2013–14.  
_Prerequisite:_ Aramaic A or the equivalent.

[Aramaic C. Introduction to Syriac]
Catalog Number: 3494  
_Wolfhart P. Heinrichs and members of the Department_  
_Full course (indivisible). M., W., F., at 1. EXAM GROUP: 6_  
Basic Syriac grammar and syntax, with selected readings from the Syriac Bible and other early texts.  
_Note:_ Expected to be given in 2013–14. Offered jointly with the Divinity School as 4109.

[Aramaic 120. Introduction to Jewish Babylonian Aramaic]
Catalog Number: 68552  
_Instructor to be determined_  
_Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_
Introduction to the Aramaic of the Babylonian Talmud with readings from talmudic texts.

Note: Expected to be given in 2013–14. Two semesters or the equivalent of Hebrew or one semester or the equivalent of ancient Aramaic. Jointly offered with the Divinity School as 4018.

**Aramaic 125a. Advanced Syriac**  
Catalog Number: 0378  
*Wolfhart P. Heinrichs*  
*Half course (fall term). Tu., Th., at 1. EXAM GROUP: 15*

**Graduate Courses of Reading and Research**

*Aramaic 300. Aramaic Language and Literature*  
Catalog Number: 5758  
*Shaye J.D. Cohen 4180 (on leave spring term), Wolfhart P. Heinrichs 4988 (on leave spring term), and Peter Machinist 2812 (spring term only)*

**Armenian**

See also Armenian Studies.

**For Undergraduates and Graduates**

**Armenian A. Elementary Classical Armenian**  
Catalog Number: 5476  
*James R. Russell*  
*Full course (indivisible). Tu., 2–4. EXAM GROUP: 16, 17*  
Introduction to classical Armenian grammar and reading of selected texts.

**Armenian B. Elementary Modern Eastern Armenian**  
Catalog Number: 7168  
*James R. Russell*  
*Full course (indivisible). Th., 3–6. EXAM GROUP: Spring: 17, 18*  
Introduction to the spoken and literary language of the Republic of Armenia.  
*Note: Expected to be given in 2013–14.*

**Armenian 120. Armenian Magical Texts**  
Catalog Number: 7221  
*James R. Russell*  
*Half course (spring term). Tu., 2–4.*  
Armenian magical texts include codices, scrolls, and separately-printed saints’ lives used for good or ill, containing magic squares and symbols, the latter mostly deriving from Islamic magic. The course will consider literary sources of magic texts (e.g., the prayer Havatov khostovanim, the meditations of Narek), parallel traditions (esp. Christian Ethiopia), and the consideration of the paintings in Armenian magical manuscripts from the standpoint of the genre of Outsider Art.  
*Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2200.*
[Armenian 130. Advanced Classical Armenian]
Catalog Number: 4926
James R. Russell
Full course. W., 5:30-7:30 pm.
The text of St. Grigor Narekats’i Matean olbergut’ean, with other mystical texts from Armenian and Eastern Christian traditions.
Note: Expected to be given in 2013–14.
Prerequisite: Armenian A.

Armenian Studies 102. Introduction to Armenian Civilization
Catalog Number: 50965
James R. Russell
Half course (fall term). W., 3–5:30. EXAM GROUP: 8, 9
A survey of the history and culture of the Armenian people from earliest times to the Genocide and Soviet era.
Note: This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

Graduate Courses of Reading and Research

*Armenian 300. Armenian Language and Literature
Catalog Number: 0240
James R. Russell 3411

Egyptian

For Undergraduates and Graduates

Egyptian Aa. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs I
Catalog Number: 13886
Peter Der Manuelian
Half course (spring term). M., W., 1:30–3. EXAM GROUP: 6, 7
This language course explores the fundamentals of Middle Egyptian, the classical stage of Egyptian hieroglyphs used throughout much of ancient Egyptian history. Lessons in the Egyptian writing system, grammar, and culture, with weekly vocabulary and exercises, will introduce the language and verbal system in a systematic fashion. By the end of the semester, students may begin to read selections from Egyptian classic stories and historical texts. Visits to the Semitic Museum and the Museum of Fine Arts, Boston, in order to read ancient hieroglyphic inscriptions on the original monuments, may also be included.
Note: Continues fall term, 2013, as Egyptian Ab. Offered jointly with the Divinity School as 4120.

[Egyptian Ab. The Language of the Pharaohs: Introduction to Egyptian hieroglyphs II]
Catalog Number: 80515
Peter Der Manuelian
Half course (fall term). M., W., 2–3:30. EXAM GROUP: 7, 8
Continues Middle Egyptian I from the fall semester. Students will complete the introductory grammar book lessons, and move on to read a selection of basic stories, historical and biographical inscriptions, in the original hieroglyphs. Visits to the Egyptian galleries of the Museum of Fine Arts, Boston, in order to read some of the ancient hieroglyphic inscriptions on the original monuments, may also be included.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 4121.

*Prerequisite:* Egyptian Aa, Middle Egyptian I or consent of instructor.

[*Egyptian 150. Voices from the Nile: Ancient Egyptian Literature in Translation*]

Catalog Number: 19657 Enrollment: Limited to 20.

*Peter Der Manuelian*

Half course (spring term). M., W., at 11. EXAM GROUP: 4

Examines several literary genres, from the Pyramid Age through at least the New Kingdom (ca. 2500-1000 BCE), including royal decrees, autobiographies, the Pyramid Texts, legal documents, letters to the living (and dead), love stories and poetry, military texts, religious rituals, and tomb robber court trial transcripts. Special emphasis on classical tales of the Middle Kingdom ("The Shipwrecked Sailor," "The Story of Sinuhe," etc.). Lectures, class discussion; no prerequisites.

*Note:* Expected to be given in 2014–15. Offered jointly with the Divinity School as 2131.

**Cross-listed Courses**

*Anthropology 1250. The Pyramids of Giza: Technology, Archaeology, History: Seminar*

*Freshman Seminar 30g. Digging Up the Past: Harvard and Egyptian Archaeology - (New Course)*

*Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt*

**Graduate Courses of Reading and Research**

*Egyptian 300. Reading and Research in Egyptology*

Catalog Number: 71257

*Peter Der Manuelian 4279*

Note: This course must be taken for letter grade.

**Hebrew (Classical and Modern)**

See also Ancient Near Eastern and Biblical Studies and Jewish Studies.

**For Undergraduates and Graduates**

*Hebrew 130. Scriptural Interpretation in Ancient Israel: Inner-Biblical Exegesis*

Catalog Number: 53182

*D. Andrew Teeter (Divinity School)*

Half course (fall term). Tu., 4–6. EXAM GROUP: 18

An examination of the forms, methods, and aims of scriptural interpretation within the Hebrew Bible itself. Sessions will combine consideration of recent scholarship on "inner-biblical exegesis" with close readings of biblical texts (narrative, legal, prophetic, apocalyptic, hymnic)
in Hebrew.
*Note:* Two years of Biblical Hebrew strongly recommended. Offered jointly with the Divinity School as 1308.

**Hebrew 135. Introduction to Rabbinic Hebrew**
Catalog Number: 83659  
*Peter Machinist*  
*Half course (spring term). Hours to be arranged.*  
An inductive introduction to rabbinic Hebrew and literature, with readings from across the rabbinic corpora and attention to some of the major theories, methods, and problems in the study of rabbinic texts.  
*Note:* Jointly offered with the Divinity School is 4036.  
*Prerequisite:* Two semesters or the equivalent of Hebrew, any period.

**Primarily for Graduates**

**[Hebrew 230. Midrash: The Figure of Abraham: Seminar]**  
Catalog Number: 7364  
*Jon D. Levenson (Divinity School)*  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*  
A close reading in Hebrew of some rabbinic midrashim centering on the figure of Abraham. Emphasis on the acquisition of the textual skills necessary for studying midrash and understanding the role of Abraham in rabbinic theology. Comparison with other primary sources about Abraham from Second Temple Judaism, early Christianity, and the Qur’an, presented in English.  
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1803.  
*Prerequisite:* Sound reading knowledge of Hebrew (any period).

**[Hebrew 237. Jeremiah]**  
Catalog Number: 83454  
*Michael D. Coogan (Divinity School)*  
*Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11*  
A close examination of the book of Jeremiah, with special attention to its historical context and textual and literary history. Knowledge of Hebrew not required.  
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1121.  
*Prerequisite:* Introduction to Hebrew Bible/Old Testament or the equivalent.

**Language Courses**

**For Undergraduates and Graduates**

**Classical Hebrew A. Elementary Classical Hebrew**
Catalog Number: 8125  
*Peter Machinist*  
*Full course (indivisible). M., W., F., at 10. EXAM GROUP: 3*  
A thorough and rigorous introduction to biblical Hebrew, with emphasis on grammar in the first
term, and translation of biblical prose in the second. Daily preparation and active class participation mandatory.

**Note:** Offered jointly with the Divinity School as 4010.

**Classical Hebrew 120a. Intermediate Classical Hebrew I**
Catalog Number: 5545
*D. Andrew Teeter (Divinity School) and members of the Department*
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
Readings in prose books; review of grammar.
**Note:** Offered jointly with the Divinity School as 4020.
**Prerequisite:** Classical Hebrew A or equivalent.

**Classical Hebrew 120b. Intermediate Classical Hebrew II**
Catalog Number: 8494
*D. Andrew Teeter (Divinity School) and members of the Department*
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3
Readings in prose and poetic books; review of grammar.
**Note:** Offered jointly with the Divinity School as 4021.
**Prerequisite:** Classical Hebrew 120a or equivalent.

**Classical Hebrew 130ar. Rapid Reading Classical Hebrew I**
Catalog Number: 7895
*Jon D. Levenson (Divinity School)*
Half course (fall term). Th., 1–3. EXAM GROUP: 15, 16
**Note:** Offered jointly with the Divinity School as 1625.
**Prerequisite:** Classical Hebrew A, 120a, and 120b, or equivalent.

**Classical Hebrew 130br. Rapid Reading Classical Hebrew II**
Catalog Number: 7896
*Jon D. Levenson (Divinity School)*
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
**Note:** Offered jointly with the Divinity School as 1626.
**Prerequisite:** Classical Hebrew 130a or equivalent.

**Classical Hebrew 138. Historical Grammar of Biblical Hebrew**
Catalog Number: 4415
*Instructor to be determined*
Half course (spring term). Hours to be arranged.
This course will trace the changes in Hebrew grammar in its ancient phases through the study of inscriptive, biblical, and extra-biblical texts.
**Note:** Expected to be given in 2013–14.
**Prerequisite:** Classical Hebrew 130 or equivalent.

**Modern Hebrew B. Elementary Modern Hebrew**
Catalog Number: 4810
*Irit Aharony*
Full course (indivisible). M. through F., at 10. EXAM GROUP: 3, 12
The course introduces students to the phonology and script as well as the fundamentals of morphology and syntax of Modern Hebrew. Emphasis is placed on developing reading, speaking, comprehension and writing skills, while introducing students to various aspects of contemporary Israeli society and culture.
Note: Offered jointly with the Divinity School as 4015. Not open to auditors. Cannot be taken pass/fail. Cannot divide for credit.

Modern Hebrew 120a. Intermediate Modern Hebrew I
Catalog Number: 1711
Irit Aharony
Half course (fall term). M. through F., at 11. EXAM GROUP: 4, 13
The course reinforces and expands knowledge of linguistic and grammatical structures, with emphasis on further developing the four skills. Readings include selections from contemporary Israeli literature, print media, and internet publications. Readings and class discussions cover various facets of Israeli high and popular culture.
Note: Conducted primarily in Hebrew. Offered jointly with the Divinity School as 4040.
Prerequisite: Modern Hebrew B or passing of special departmental placement test.

Modern Hebrew 120b. Intermediate Modern Hebrew II
Catalog Number: 2563
Irit Aharony
Half course (spring term). M. through F., at 11. EXAM GROUP: 4, 13
Continuation of Hebrew 120a.
Note: Conducted primarily in Hebrew. Offered jointly with the Divinity School as 4041.
Prerequisite: Modern Hebrew 120a.

Modern Hebrew 130a (formerly Modern Hebrew 125a). Advanced Modern Hebrew I
Catalog Number: 4985
Irit Aharony and assistant
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course constitutes the third year of the Modern Hebrew language sequence. The course emphasizes the development of advanced proficiency in all skills. Readings include texts of linguistic and cultural complexity that cover contemporary Israeli literature and culture.
Note: Conducted in Hebrew. Not open to auditors. Offered jointly with the Divinity School as 4042.
Prerequisite: Modern Hebrew 120a, 120b, or equivalent level of proficiency.

Modern Hebrew 130b (formerly Modern Hebrew 125b). Advanced Modern Hebrew II
Catalog Number: 28788
Irit Aharony and assistant
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course is a continuation of Hebrew 130. Texts, films, and other materials expose students to the richness and complexity of the contemporary sociolinguistics of Israeli society.
Note: Conducted in Hebrew. Not open to auditors. Offered jointly with the Divinity School as
4043.
Prerequisite: Modern Hebrew 130a, or equivalent level of proficiency.

**Modern Hebrew 241br. Advanced Seminar in Modern Hebrew: Israeli Culture**
Catalog Number: 6949
Irit Aharony
Half course (spring term). M., 7–9 p.m., Th., 1–3. EXAM GROUP: 9, 15, 16
This course constitutes the final level of Modern Hebrew language studies. The course offers representative readings and screenings from contemporary Israeli literature and cinema, and it forms bases of discussion on major cultural and linguistic themes through academic readings. 
*Note:* Discussions, papers, movies and texts presented only in Hebrew. Not open to auditors. Offered jointly with the Divinity School as 4045.
Prerequisite: Modern Hebrew 130b or equivalent.

**Literature and History Courses**

**For Undergraduates and Graduates**

**Primarily for Graduates**

*Hebrew 200r. Problems in the Literature, History, and Religion of Ancient Israel: Seminar*
Catalog Number: 3265
Peter Machinist, Richard J. Saley, D. Andrew Teeter (Divinity School) and members of the Department
Half course (fall term). Th., 4–6. EXAM GROUP: 18
Topic for 2012-13 to be determined.
*Note:* Primarily for doctoral students in Hebrew Bible. Offered jointly with the Divinity School as 1810.

[Hebrew 208r. Literature of Israel: Seminar]
Catalog Number: 1356
Peter Machinist
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Topic for 2014-15 to be determined; the topic for 2010-11 was "The book of Qohelet (Ecclesiastes)".
*Note:* Expected to be given in 2014–15. Jointly offered with the Divinity School as 1825.
Prerequisite: Good reading knowledge of Biblical Hebrew. Acquaintance with other relevant ancient and modern languages desirable.

[Hebrew 217. The Medieval Torah Commentary: A Practical Introduction: Seminar]
Catalog Number: 5883
Jon D. Levenson (Divinity School)
Half course (fall term). Hours to be arranged.
An introduction to the use of medieval Jewish biblical commentaries as a resource for modern exegetes. Some comparison of the medieval hermeneutical presuppositions with those of the
distinctively modern forms of biblical study.

Note: Expected to be given in 2015–16. Offered jointly with the Divinity School as 1836.

Prerequisite: Three years of college-level Hebrew (any period).

**Hebrew 218. Joseph and Esther: Seminar**
Catalog Number: 0880
Jon D. Levenson (Divinity School)
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
A close critical reading of Genesis 37-50 and the Book of Esther in Hebrew. Emphasis on literary design and religious messages and on the influence of the story of Joseph upon the Book of Esther.

Note: Expected to be given in 2015–16. Offered jointly with the Divinity School as 1802.

Prerequisite: Three years of Hebrew or the equivalent, and a good acquaintance with the historical-critical method.

**Hebrew 230. Midrash: The Figure of Abraham: Seminar**
Catalog Number: 7364
Jon D. Levenson (Divinity School)
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
A close reading in Hebrew of some rabbinic midrashim centering on the figure of Abraham. Emphasis on the acquisition of the textual skills necessary for studying midrash and understanding the role of Abraham in rabbinic theology. Comparison with other primary sources about Abraham from Second Temple Judaism, early Christianity, and the Qur’an, presented in English.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1803.

Prerequisite: Sound reading knowledge of Hebrew (any period).

**Hebrew 235. The Binding of Isaac (Aqedah): Seminar**
Catalog Number: 0170
Jon D. Levenson (Divinity School)
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17

Note: Offered jointly with the Divinity School as 1808.

Prerequisite: Three years of Hebrew or the equivalent, and acquaintance with historical critical methods.

**Hebrew 236. Song at the Sea: Seminar**
Catalog Number: 6496
Jon D. Levenson (Divinity School)
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1816.
Prerequisite: An introductory course in the critical study of the Hebrew Bible and a solid command of Hebrew grammar (any period).

Graduate Courses of Reading and Research

*Hebrew 300. Classical Hebrew Language and Literature
Catalog Number: 7831
Shaye J.D. Cohen 4180 (on leave spring term), Jon D. Levenson (Divinity School) 2264, Peter Machinist 2812, and Lawrence E. Stager 1468

*Hebrew 350. Hebrew Language and Literature
Catalog Number: 4408
Shaye J.D. Cohen 4180 (on leave spring term), Jay M. Harris 2266, Jon D. Levenson (Divinity School) 2264, and Bernard Septimus 7160

Iranian

See also above under Near Eastern Civilizations; Early Iranian Civilizations; Islamic Civilizations; and below under Persian.

Primarily for Undergraduates

For Undergraduates and Graduates

Cross-listed Courses

Linguistics 221r. Workshop in Indo-European

Primarily for Graduates

Iranian 209b. Readings in Old Avestan - (New Course)
Catalog Number: 18317
P. Oktor Skjaervo
Half course (fall term). F., 3–5. EXAM GROUP: 8, 9
Readings in Old Avestan.

Graduate Courses of Reading and Research

*Iranian 300. Reading and Research in Iranian Languages and Literatures
Catalog Number: 8155
James R. Russell 3411 (spring term only) and P. Oktor Skjaervo 2869 (on leave spring term)

Persian

See also above under Near Eastern Civilizations; Early Iranian Civilizations; Islamic Civilizations; Iranian.
For Undergraduates and Graduates

**Persian A. Elementary Persian**
Catalog Number: 8143
Daniel Reza Rafinejad
Full course (indivisible). M., W., F., at 10, plus two additional hours of speaking section to be arranged. EXAM GROUP: 3
Introduction to the grammar of modern literary and spoken Persian. Selected readings from contemporary and classical Persian literature.
*Note:* Not open to auditors. Cannot be taken pass/fail. Cannot divide for credit.

**Persian Ba. Intermediate Persian I**
Catalog Number: 2206
Daniel Reza Rafinejad
Half course (fall term). M., W., (F.), at 11, and two additional hours to be arranged. EXAM GROUP: 4
Readings in modern prose literature. Introduction to classical metrics and prosody. Readings in classical prose and poetry.
*Note:* Not open to auditors. Cannot be taken pass/fail.

**Persian Bb. Intermediate Persian II**
Catalog Number: 3712
Daniel Reza Rafinejad
Half course (spring term). M., W., F., at 11, and two additional hours to be arranged. EXAM GROUP: 4
Continuation of Persian Ba.
*Note:* Not open to auditors. Cannot be taken pass/fail.

**Persian 131r. Advanced Modern Persian**
Catalog Number: 0258
Chad Kia
Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8
Readings from modern Persian prose and poetry and discussion of Iranian movies and documentaries inspired by them.
*Note:* Not open to auditors. Cannot be taken pass/fail.
Prerequisite: Persian 120b or equivalent.

**Persian 132r. Advanced Classical Persian**
Catalog Number: 0814
Daniel Reza Rafinejad
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Introduces students to styles and genres of Classic Persian literary heritage, including a systematic review of classical grammar. Readings include historiographical, geographical and biographical texts, as well as readings from "Adab" (Belles-Lettres) literature.
*Note:* Not open to auditors. Cannot be taken pass/fail.
Prerequisite: Persian 120b or equivalent.
[Persian 150r. Readings in Persian Historians, Geographers and Biographers]
Catalog Number: 6538
Roy Mottahedeh
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.

Persian 151r. Sufi traditions in Persian Literature
Catalog Number: 58728
Chad Kia
Readings in classical Persian literature from Rudaki and Attar to Rumi and Hafez, with emphasis on fundamental themes of the Sufi tradition. Practice in grammar and composition at an advanced level will develop the student’s ability to read high literary texts, both in prose and poetry.
Note: Offered jointly by the Divinity School as 4070.
Prerequisite: At least two years of Persian or equivalent.

Persian 152. Literary and Visual Narrative in the Persian Epic Tradition
Catalog Number: 67634
Chad Kia
Half course (fall term). Tu., 1:30–3:30. EXAM GROUP: 15, 16, 17
Both poetry and the art of painting in medieval Persianate cultures developed to a high level of artistic excellence in the context of court patronage. This advanced Persian reading course examines that development through the epic tradition in classical Persian poetry including long narratives in heroic, romance and ethical genres composed in the masnavi (double-rhymed verse) form, and considers the parallel art of manuscript illustration as a visual dimension of that narrative. Beginning with the heroic epic of Shahnameh by Ferdowsi, this survey of long narrative poetry in masnavi form will include the epic romances of Nizami and didactic epics by Sa’di and others and will consider the interaction of this poetry with Persian painting and manuscript illustration.
Prerequisite: Two years of Persian or equivalent.

[Persian 160r. Readings in Indo-Persian Classical Literature]
Catalog Number: 75847
Ali S. Asani
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.

Graduate Courses of Reading and Research

*Persian 300. Persian Language and Literature
Catalog Number: 6962
Roy Mottahedeh 1454 (on leave spring term) and William E. Granara 1054

Semitic Philology
For Undergraduates and Graduates

[Semitic Philology 130. Diglossia in Semitic Languages]
Catalog Number: 82868
Instructor to be determined
Diglossia describes a situation in which two (or more) languages coexist, or two varieties of one language, within one speech community. In this course we will examine various aspects of such a linguistic situation from different theoretical points of view, considering this fascinating phenomenon in the history of the Semitic languages.
Note: Expected to be given in 2013–14.

[Semitic Philology 140. Introduction to the Comparative Study of Semitic Languages]
Catalog Number: 8602
Instructor to be determined
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Note: Expected to be given in 2013–14.
Prerequisite: Knowledge of two Semitic languages.

[Semitic Philology 151. Introduction to Northwest Semitic Epigraphy]
Catalog Number: 2858
John L. Ellison
Half course (fall term). Hours to be arranged.
Readings in Hebrew, Phoenician and other Northwest Semitic inscriptions with an introduction to methods and techniques of Northwest Semitic palaeography, and attention to problems of historical grammar.
Note: Expected to be given in 2013–14.
Prerequisite: Good working knowledge of Classical (biblical) Hebrew.

[Semitic Philology 152. Introduction to Ugaritic]
Catalog Number: 2777
John L. Ellison
Half course (fall term). F., 2–4. EXAM GROUP: 7, 8
Introduction to Ugaritic grammar, with readings in mythological, epistolary, and administrative texts.
Prerequisite: Good working knowledge of Classical (biblical) Hebrew.

Primarily for Graduates

[Semitic Philology 200r. Comparative Semitic Grammar: Seminar]
Catalog Number: 0168
Instructor to be determined
Half course (spring term). Hours to be arranged.
Topic for 2011-12: To be determined.
Note: Expected to be given in 2013–14.
Prerequisite: Semitic Philology 152
Semitic Philology 220r. Northwest Semitic Epigraphy: Seminar
Catalog Number: 2948
John L. Ellison
Half course (spring term). F., 2–4. EXAM GROUP: 7, 8
Prerequisite: Semitic Philology 152.

Cross-listed Courses

Linguistics 221r. Workshop in Indo-European

Graduate Courses of Reading and Research

*Semitic Philology 300. Semitic and Afroasiatic Languages and Literatures
Catalog Number: 2762
Wolfhart P. Heinrichs 4988 (on leave spring term)

Turkish (Ottoman and Modern)

See also above under Near Eastern Civilizations; Islamic Civilizations.

For Undergraduates and Graduates

Turkish A. Elementary Modern Turkish
Catalog Number: 2527
Himmet Taskomur
Full course (indivisible). M. through F., at 10. EXAM GROUP: 3, 12
Emphasis on all aspects of Turkish grammar toward developing a solid foundation for speaking, listening, reading, writing, and vocabulary skills.
Note: Not open to auditors. Cannot be taken pass/fail. Cannot divide for credit.

[Turkish 120a. Intermediate Modern Turkish I]
Catalog Number: 4009
Himmet Taskomur
Half course (fall term). M. through F., at 10. EXAM GROUP: 3, 12
Emphasis on complex sentence structure and building communicative competence in describing events and expressing ideas through exercises in reading, writing, and speaking.
Note: Expected to be given in 2013–14. Not open to auditors.
Prerequisite: Turkish A or equivalent.

[Turkish 120b. Intermediate Modern Turkish II]
Catalog Number: 1394
Himmet Taskomur
Half course (spring term). M. through F., at 10. EXAM GROUP: 3, 12
Studies in argumentative and literary prose.
2012-2013 Previous Courses of Instruction

Note: Expected to be given in 2013–14. Not open to auditors.
Prerequisite: Turkish 120a or equivalent.

**Turkish 121. Elementary Uzbek**
Catalog Number: 14198
William E. Granara and assistant
Full course (indivisible). Fall: M. through Th., at 9. EXAM GROUP: Fall: 2, 11
Introduction to conversational and literary Uzbek. Overview of the grammar, intensive practice of the spoken language, and reading of contemporary texts.
Note: Some knowledge of Modern Turkish or other Turkic language helpful but not required. For information on Uzbek instruction at other levels, please contact the Student Programs Officer at the Davis Center for Russian and Eurasian Studies, reeca@fas.harvard.edu.

**Turkish 125a. Intermediate Uzbek I**
Catalog Number: 2947
William E. Granara and assistant
Half course (fall term). Hours to be arranged.
Continuation of Elementary Uzbek with an emphasis on further development of both conversational and literary Uzbek.
Note: Expected to be given in 2013–14. For information on Uzbek instruction at other levels, please contact the Student Programs Officer at the Davis Center for Russian and Eurasian Studies, reeca@fas.harvard.edu.
Prerequisite: Turkish 121b or equivalent.

**Turkish 125b. Intermediate Uzbek II**
Catalog Number: 0125
William E. Granara and assistant
Half course (spring term). Hours to be arranged.
A continuation of Turkish 125a.
Prerequisite: Turkish 125a or equivalent.

**Turkish 130a. Advanced Turkish I**
Catalog Number: 42651
William E. Granara and assistant
Gaining and improving advanced language skills in Modern Turkish through reading, writing, listening, and speaking with special emphasis on the proper usage of vocabulary and idiomatic expressions.
Note: Not open to auditors.

**Turkish 130b. Advanced Turkish II**
Catalog Number: 4354
William E. Granara and assistant
Studies in literary and idiomatic prose through readings, discussions, and writing of short analytical papers.
2012-2013 Previous Courses of Instruction

Note: Not open to auditors.
Prerequisite: Turkish 130a or equivalent.

**Turkish 140a. Introduction to Ottoman Turkish I**
Catalog Number: 8163
Himmet Taskomur
Half course (fall term). Section I: M., W., 12–2; Section II: M., 3–5, W., 2–4.
Introduction to basic orthographic conventions and grammatical characteristics of Ottoman Turkish through readings in printed selections from the 19th and 20th centuries, and exercises on techniques.
Note: Not open to auditors.
Prerequisite: Turkish 130a or equivalent.

**Turkish 140b. Introduction to Ottoman Turkish II**
Catalog Number: 8298
Himmet Taskomur
Half course (spring term). Hours to be arranged.
Continuation of Turkish 140a. Exercises on specialized orthographic conventions and grammatical characteristics of Ottoman Turkish through readings in printed selections from the 19th and 20th centuries.
Note: Not open to auditors.
Prerequisite: Turkish 140a or equivalent.

**[Turkish 145. Readings in Ottoman Language and Culture: Early Modern Travel Literature]**
Catalog Number: 0095
Himmet Taskomur
Half course (spring term). Hours to be arranged.
Theme: "Early Modern Travel Literature". The course introduces students to various genres of travel writing by focusing on selected themes, including language registers, styles of travelogues.
Note: Expected to be given in 2013–14.
Prerequisite: Advance reading proficiency in Ottoman Turkish.

**[Turkish 150a. Advanced Ottoman Turkish]**
Catalog Number: 91716
Himmet Taskomur
Half course (fall term). F., 2–4:30, Tu., 4–6. EXAM GROUP: 7, 8, 9, 18
Note: Expected to be given in 2013–14. Not open to auditors.
Prerequisite: Turkish 140 or equivalent; one year of Arabic or Persian desirable.

**[Turkish 150b. Advanced Ottoman Turkish]**
Catalog Number: 40194
Himmet Taskomur
Half course (spring term). M., W., 6–8 p.m. EXAM GROUP: 9
Bureaucracy and Empire: Introduction to Ottoman Archival Research. The course introduces research tools for Ottoman archives and surveys central government documents focusing on
paleography, diplomatics and linguistic features of documents.  
*Note:* Expected to be omitted in 2013–14. Not open to auditors.  
*Prerequisite:* Turkish 140 or equivalent; one year of Arabic or Persian desirable.

**Graduate Courses of Reading and Research**

*Turkish 300. Turkish Languages and Literatures*  
Catalog Number: 7702  
William E. Granara 1054, Cemal Kafadar 2459 (on leave 2012-13), and Himmet Taskomur 6296

**Yiddish**

See also above under Near Eastern Civilizations: Jewish Studies.

**Primarily for Undergraduates**

**Cross-Listed Courses**

**Culture and Belief 43. The World of Yiddish**

**For Undergraduates and Graduates**

**Yiddish A. Elementary Yiddish**  
Catalog Number: 4623  
Eitan Lev Kensky and staff  
*Full course (indivisible). M., W., (F.), at 10. EXAM GROUP: 3*  
Introduction to the Yiddish language, as written and spoken in Eastern Europe, the Americas, Israel, and around the world, and to the culture of Ashkenazic Jews. Development of reading, writing, speaking, and oral comprehension skills. Course materials include rich selections from Jewish humor, Yiddish songs, and films of Jewish life past and present.  
*Note:* For students with little or no knowledge of Yiddish. Additional sections at different times may be added as needed.

**Yiddish B. Intermediate Yiddish I**  
Catalog Number: 6023  
Eitan Lev Kensky and staff  
*Half course (fall term). M., at 9, Th., at 11.*  
Further development of reading, writing, speaking, and oral comprehension skills. Introduction to features of the main Yiddish dialects: Polish/Galician, Ukrainian/Volhynian, and Lithuanian/Belorussian. Course materials include selections from modern Yiddish fiction, poetry, songs, the press, and private letters, as well as pre-WWII and contemporary Yiddish films. Occasional visits from native Yiddish speakers.  
*Note:* Additional sections at different times may be added as needed.  
*Prerequisite:* Yiddish A or equivalent.
Yiddish Bb. Intermediate Yiddish II
Catalog Number: 1239
Eitan Lev Kensky and staff
Half course (spring term). M., W., at 11. EXAM GROUP: 4
Continuation of Yiddish Ba.
Prerequisite: Yiddish Ba or permission of the instructor.

Yiddish Ca. Advanced Yiddish I
Catalog Number: 8331 Enrollment: To enroll, please contact the instructor.
Ruth R. Wisse and staff
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
Emphasis on building advanced vocabulary from the three main lexical components, Germanic, Hebrew-Aramaic, and Slavic, and further development of writing, reading, and speech. Continued exploration of the main Yiddish dialects. Introduction to various styles of Yiddish literature, journalism, theater, film, and song, particularly from the nineteenth century to the present, including contemporary sources from both secular Yiddish culture and the Yiddish-speaking "ultra-orthodox" communities of New York, Jerusalem, and elsewhere.
Note: Expected to be given in 2013–14. Additional sections at different times may be added as needed.
Prerequisite: Yiddish Bb or permission of the instructor.

Yiddish Cb. Advanced Yiddish II
Catalog Number: 8968 Enrollment: To enroll, please contact the instructor.
Ruth R. Wisse and staff
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
Continuation of Yiddish Ca.
Note: Expected to be given in 2013–14.
Prerequisite: Yiddish Ca or permission of the instructor.

Primarily for Graduates

Yiddish 200r. Modern Yiddish Literature: Seminar
Catalog Number: 4263
Ruth R. Wisse
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Note: See Jewish Studies 105 and 109.
Prerequisite: Reading knowledge of Yiddish required.

Graduate Courses of Reading and Research

*Yiddish 300. Yiddish Language and Literature
Catalog Number: 7833
Ruth R. Wisse 3177 (on leave fall term)
Neurobiology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Degrees in Neurobiology

Venkatesh N. Murthy, Professor of Molecular and Cellular Biology (Chair) (on leave fall term)
Richard T. Born, Professor of Neurobiology (Medical School)
Randy L. Buckner, Professor of Psychology and of Neuroscience
Florian Engert, Professor of Molecular and Cellular Biology
Lisa V. Goodrich, Associate Professor of Neurobiology (Medical School)
Takao K. Hensch, Professor of Molecular and Cellular Biology
Jeff W. Lichtman, Jeremy R. Knowles Professor of Molecular and Cellular Biology (on leave spring term)
Margaret S. Livingstone, Professor of Neurobiology (Medical School)
Bence P. Olveczky, John L. Loeb Associate Professor of the Natural Sciences
Aravinthan D. T. Samuel, Professor of Physics
Joshua R. Sanes, Jeff C. Tarr Professor of Molecular and Cellular Biology (on leave spring term)
Maurice A. Smith, Associate Professor of Bioengineering
Yun Zhang, Associate Professor of Organismic and Evolutionary Biology

Other Faculty Offering Instruction in Neurobiology

Ryan Wesley Draft, Lecturer on Molecular and Cellular Biology
Laura M. Magnotti, College Fellow in the Department of Molecular and Cellular Biology

Neurobiology is the science of how the nervous system organizes behavior. This singular question has spawned a field of study with remarkable vertical range. It investigates phenomena on vastly different scales, from molecules to societies, and draws upon many of the classical disciplines for experimental tools and explanatory frameworks. The neurobiology concentration has its natural hub in the life sciences but emphasizes a solid grounding in other relevant fields. It provides a broad preparation for advanced studies in any of the life sciences or in medicine, and students will have many opportunities for hands-on laboratory experience and independent research projects. The undergraduate concentration is administered by the Department of Molecular and Cellular Biology. Curriculum and academic policies are determined by a Standing Committee with representatives from several departments of the Faculty of Arts and Sciences, and from other schools as appropriate to ensure the required breadth of the program. The graduate program in Neurobiology is administered by the Medical Sciences Chapter. Graduate level courses on Neurobiology topics can be found in various fields and related chapters of the
course catalog. For more information about the Neurobiology Concentration, please visit the Neurobiology Life Science Page.

**Primarily for Undergraduates**

For a complete listing of courses that count toward the Neurobiology concentration, students should consult the Neurobiology website at www.lifescience.fas.harvard.edu.

The Neurobiology 95hf Program is taught by MCB, OEB, and Medical School faculty. Ordinarily the tutorials are half courses spread throughout the year and cannot be divided or combined for credit. Neurobiology tutorials are considered advanced neurobiology courses. Ordinarily, only one tutorial course may be counted toward the secondary field.

Students should feel free to contact the tutorial instructors directly. Their names, phone numbers, and e-mail addresses, as well as tutorial seminar course descriptions, are posted on the Life Sciences website under the concentration course listings at www.lifescience.fas.harvard.edu. Please consult the Neurobiology website for dates and times of first meetings.

**Tutorials**

*Neurobiology 95hfd. Novel Therapeutics in the Central Nervous System*

Catalog Number: 3437
Ryan Wesley Draft and members of the Department
Half course (throughout the year). W., 4:30–6. EXAM GROUP: 9
Recent advances have elucidated new non-traditional molecular signaling pathways involved in many disorders and injury paradigms in the CNS. This seminar will focus on examining novel targets and ‘outside the box’ approaches to treat CNS disorders such as Alzheimer’s, Spinal Cord Injury, and Multiple Sclerosis. To do this we will examine primary and clinical literature and explore drug design strategies.  
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

*Neurobiology 95fhf. Dopamine*

Catalog Number: 2579
Ryan W. Draft and members of the Department
Half course (throughout the year). M., 4–5:30.
A Parkinson’s victim regains control of her body with l-dopa. A schizophrenic man paralyzed by fear & hallucinations is freed from a mental institution by clozapine. A meth addict lies, cheats & steals, ending up emaciated & dead. Miracles and monstrosities, all related to a single molecule - dopamine. Three phases: (1) lectures & discussion led by Barak Caine; (2) Reading of 17 basic research articles and reviews with Socratic debate; (3) Presentations by students.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

[*Neurobiology 95hfj. The Sleeping Brain ]*  
Catalog Number: 6361
Jeffrey M. Ellenbogen (Medical School)
Half course (throughout the year). W., 4:30–6. EXAM GROUP: Spring: 9
This seminar will begin broadly, including discussion of the nature of conscious states, the theoretical concept of sleep, and rhythms of the brain. We will then zoom in on systems of neuroanatomy and neurophysiology pertinent to understanding the brain dynamics across the wake-sleep continuum. Particular emphasis will be placed on human electrophysiology.
Rigorous scientific thinking will be given priority over fact memorization.
Note: Expected to be given in 2013–14.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

*Neurobiology 95hfp. Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab
Catalog Number: 86442 Enrollment: Limited to 15. 
Laura M. Magnotti
Half course (throughout the year). Th., 7–8:30 p.m.
The derivation of stem cells from a human embryo ten years ago ignited an explosion of scientific and public interest. This tutorial will explore the current understanding of neural stem cells as it relates to their role in physiological and pathological states in developing and adult animals. We will also explore the generation, characterization, and manipulation of neural stem cells in current research.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80 and permission of the instructor.

*Neurobiology 95hfs. Sensation and Perception: Mapping the Touch, Sight, and Sound of Things
Catalog Number: 44178
Ryan W. Draft and members of the Department
Half course (throughout the year). Tu., 7–8:30 p.m.
Our perceptions of the feel, sight, and sound of things relies upon how the external world is organized within the brain. This course will cover the neural basis of sensation and perception, focusing on how the outer world is mapped onto the cerebral cortex. We will examine how our behavior can influence sensory maps. We will also discuss disease, tricks (perceptual illusions), and "different" senses.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

[*Neurobiology 95hfu. Building a Brain]
Catalog Number: 74392
Ryan W. Draft and members of the Faculty
Half course (throughout the year). W., 7–8:30 p.m.
Neuronal connectivity underlies brain function. This tutorial focuses on discussing and debating research related to how synaptic connections are influenced by genes, the environment, and chance to generate functional circuits and accommodate learning. In particular we will discuss molecular mechanisms, activity patterns (spontaneous and experience-evoked), and organizational rules implicated in synaptic formation and refinement in the context of many
regions within the nervous system (retina, olfactory bulb, cortex, autonomic, and neuromuscular system).

**Note:** Expected to be given in 2013–14.

**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a, MCB 80 and permission of the instructor.

*Neurobiology 95hfy. The Visual Sense - Illusions and Reality - (New Course)*
Catalog Number: 67253 Enrollment: Limited to 12.
Ryan Wesley Draft and members of the Department
Half course (throughout the year). Tu., 7–8:30 p.m.
Vision is arguably our most dominant sense, but sometimes what we see is not what it seems. Visual illusions have long perplexed and fascinated our minds. However, illusions aren’t just amusing; they can be extremely helpful in understanding the underlying mechanisms of our brain. In this course we will explore illusions to study the visual system starting at the retina ending at perception/behavior. With each new illusion, we will learn about the hierarchy of the visual system, information processing, and neural circuits.

**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

*Neurobiology 95hfw. The Neural Basis of Working Memory - (New Course)*
Catalog Number: 15731 Enrollment: Limited to 12.
Ryan Wesley Draft and members of the Department
Half course (throughout the year). Tu., 7–8:30 p.m.
Many daily tasks, such as taking lecture notes, require us to quickly store information and then recall it within seconds to minutes. This seminar will explore the neural basis of such working memory and how it differs computationally and neurally from more long-term memory.

**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a, MCB 80, and permission of the instructor.

*Neurobiology 95hfx. The Neurobiology of Sex and Aggression*
Catalog Number: 59285 Enrollment: Limited to 12.
Ryan W. Draft and members of the Department
Half course (throughout the year). M., 4–5:30.
Ever wondered why animals are attracted to the opposite sex, why they attack other animals, or how they decide with whom to mate or to fight? We will study how genetic and neural pathways direct males and females to act the way they do. Topics covered include fighting flies, testosterone-promoted male behavior, same-sex sexual partners, and more. We will also discuss the way sex research is covered by the media and its social implications.

**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a, MCB 80 and permission of the instructor.

*Neurobiology 95hfy. Seeing Time in the Brain - (New Course)*
Catalog Number: 72995 Enrollment: Limited to 12.
Ryan Wesley Draft and members of the Department.
Half course (throughout the year). Th., 7–8:30 p.m.
Time critically shapes our perceptual experience, yet how the brain represents time is poorly
understood. This course investigates the experience of time from multiple perspectives, focusing on a systems-level analysis of visual time perception. Topics include illusions of time, models of time perception, neuronal mechanisms of time, the meaning of timescales, and the influence of expectation on neural activity.

**Prerequisite:** Life and Physical Sciences A or Life Sciences 1a, MCB 80.

*Neurobiology 98r. Laboratory Research*

Catalog Number: 0494

Ryan W. Draft and members of the Department

Half course (fall term; repeated spring term). Hours to be arranged.

This course is ordinarily taken to obtain credit for independent research leading to a senior thesis. Work should be directed by a member of the Neurobiology concentration standing committee. Other research sponsors must be approved by the Head Tutor and require an appropriate co-sponsor. All students must submit registration materials for Neurobiology 98r at the time of enrollment.

**Note:** Laboratory safety session required. This course can be taken twice for concentration credit.

*Neurobiology 99 (formerly *Neurobiology 99r). Honors Thesis Tutorial*

Catalog Number: 9400

Ryan W. Draft and members of the Department

Half course (fall term; repeated spring term). Hours to be arranged.

For honors candidates writing a thesis in Neurobiology. This course is ordinarily taken in the last semester of enrollment. The Head Tutor must approve a thesis proposal prior to enrolling in Neurobiology 99.

**Note:** Laboratory safety session required.

For Undergraduates and Graduates

Cross-listed Courses in Neurobiology

*BCMP 213. Behavioral Pharmacology*
Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis

Biomedical Engineering 130 (formerly Engineering Sciences 149). Neural Control of Movement

*Life Sciences 100r. Experimental Research in the Life Sciences*

MCB 80. Neurobiology of Behavior

MCB 105. Systems Neuroscience

MCB 115. Cellular Basis of Neuronal Function

*MCB 129. The Brain: Development, Plasticity and Decline*

MCB 131. Computational Neuroscience

*MCB 145. Neurobiology of Perception and Decision Making*

*MCB 146. Experience-Based Brain Development: Causes and Consequences*

[*MCB 173. Optical Imaging in the Biological Sciences]*

MCB 186. Circadian Biology: From Cellular Oscillators to Sleep Regulation

[MCB 206. Introduction to Connectomics]
Neurobiology 204. Neurophysiology of Central Circuits
Neurobiology 207. Developmental Neurobiology
[Neurobiology 209. Neurobiology of Disease]
*Neurobiology 220. Cellular Neurophysiology
Neurobiology 221. Molecular Neurobiology
Neurobiology 230. Visual Object Recognition
OEB 57. Animal Behavior
[OEB 105 (formerly OEB 205). Neurobiology of Motor Control]
OEB 145. Genes and Behavior
OEB 223. Topics in Neurogenetics
Physics 141. The Physics of Sensory Systems in Biology
[Psychology 1307. Brain Genomics]
[Psychology 1430. Human Memory and Amnesia]
[*Psychology 2480. Human Neuropsychology/Neuroanatomy: Seminar]
SCRB 180. Development and Regeneration of the Mammalian Brain

Oceanography

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Oceanography

Eli Tziperman, Pamela and Vasco McCoy, Jr.Professor of Oceanography and Applied Physics (Chair)
Peter John Huybers, Professor of Earth and Planetary Sciences (on leave 2012-13)
James J. McCarthy, Professor of Biological Oceanography and Alexander Agassiz Professor of Biological Oceanography
Daniel P. Schrag, Sturgis Hooper Professor of Geology and Professor of Environmental Science and Engineering

Courses in the various branches of oceanography are listed separately under the headings Earth and Planetary Sciences, Biology, and Engineering Sciences in this catalog. Further opportunities for study in oceanography exist at the Woods Hole Oceanographic Institution and at the Woods Hole Marine Biological Laboratory. Interested students are invited to contact members of the Faculty Committee on Oceanography for additional advice. The committee encourages undergraduate and graduate students to pursue sea-going and other oceanography-related research and study opportunities, including during the summer, at a variety of possible institutions in the US and abroad. Interested students are encouraged to write the committee chair
for specific advice on this and to apply for funding in order to pursue such oceanography-related projects, field work, or study opportunities.

Organismic and Evolutionary Biology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Organismic and Evolutionary Biology

John Wakeley, Professor of Organismic and Evolutionary Biology (Chair)
Arkhat Abzhanov, Associate Professor of Organismic and Evolutionary Biology
Andrew J. Berry, Lecturer on Organismic and Evolutionary Biology
Andrew A. Biewener, Charles P. Lyman Professor of Biology
Kirsten Bomblies, Assistant Professor of Organismic and Evolutionary Biology
Michael R. Canfield, Lecturer on Organismic and Evolutionary Biology
Jennifer A. Carr, Preceptor in Organismic and Evolutionary Biology
Colleen M. Cavanaugh, Edward C. Jeffrey Professor of Biology (on leave 2012-13)
Stacey A. Combes, Assistant Professor of Organismic and Evolutionary Biology, Associate Professor of Organismic and Evolutionary Biology
Charles C. Davis, Professor of Organismic and Evolutionary Biology and Curator of Vascular Plants in the Harvard University Herbaria
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of Physics
Pamela Diggle, Visiting Professor of Organismic and Evolutionary Biology
Scott V. Edwards, Professor of Organismic and Evolutionary Biology, Alexander Agassiz Professor of Zoology in the Museum of Comparative Zoology, and Curator of Ornithology
Cassandra G. Extavour, Associate Professor of Organismic and Evolutionary Biology (on leave spring term)
Brian D. Farrell, Professor of Biology and Curator of Entomology in the Museum of Comparative Zoology
David R. Foster, Senior Lecturer on Biology
William Friedman, Arnold Professor of Organismic and Evolutionary Biology
Peter R. Girguis, John L. Loeb Associate Professor of the Natural Sciences
Gonzalo Giribet, Alexander Agassiz Professor of Zoology and Curator of Invertebrates in the Museum of Comparative Zoology
David A. Haig, George Putnam Professor of Organismic and Evolutionary Biology, Harvard College Professor (Director of Undergraduate Studies)
James Hanken, Professor of Biology, Alexander Agassiz Professor of Zoology in the Museum of Comparative Zoology, and Curator of Herpetology
Daniel L. Hartl, Higgins Professor of Biology
Hopi E. Hoekstra, Professor of Organismic and Evolutionary Biology and Molecular and Cellular Biology, and Curator of Mammals in the Museum of Comparative Zoology (on leave fall term)
N. Michele Holbrook, Charles Bullard Professor of Forestry
Collin H. Johnson, Preceptor in Organismic and Evolutionary Biology
Andrew H. Knoll, Fisher Professor of Natural History and Professor of Earth and Planetary Sciences
Elena M. Kramer, Bussey Professor of Organismic and Evolutionary Biology
George V. Lauder, Henry Bryant Bigelow Professor of Ichthyology and Curator of Ichthyology in the Museum of Comparative Zoology (Director of Graduate Studies-spring term)
Jonathan Losos, Monique and Philip Lehner Professor for the Study of Latin America and Curator in Herpetology (Director of Graduate Studies-fall term) (on leave spring term)
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
James Mallet, Distinguished Lecturer on Organismic and Evolutionary Biology
Christopher Marx, Associate Professor of Organismic and Evolutionary Biology
James J. McCarthy, Professor of Biological Oceanography and Alexander Agassiz Professor of Biological Oceanography
Paul R. Moorcroft, Professor of Organismic and Evolutionary Biology
Martin A. Nowak, Professor of Mathematics and of Biology
Bence P. Olveczky, John L. Loeb Associate Professor of the Natural Sciences
Donald H. Pfister, Asa Gray Professor of Systematic Botany and Curator of the Farlow Library and Herbarium
Naomi E. Pierce, Sidney A. and John H. Hessel Professor of Biology and Curator of Lepidoptera (on leave fall term)
Anne E. Pringle, Associate Professor of Organismic and Evolutionary Biology
Andrew Richardson, Assistant Professor of Organismic and Evolutionary Biology
Pardis Sabeti, Associate Professor of Organismic and Evolutionary Biology
Robert M. Woollacott, Professor of Biology and Curator of Marine Invertebrates in the Museum of Comparative Zoology
Yun Zhang, Associate Professor of Organismic and Evolutionary Biology

Other Faculty Offering Instruction in Organismic and Evolutionary Biology

William H. Bossert, David B. Arnold, Jr. Professor of Science
Michael S. Gilmore, Sir William Osler Professor of Ophthalmology (Medical School)
David T. Johnston, Assistant Professor of Earth and Planetary Sciences
Arthur L. Lage, Associate Professor of Surgery (Medical School)
Anna G. Warrener, Lecturer on Human Evolutionary Biology

Affiliates of the Department of Organismic and Evolutionary Biology

Daniel E. Lieberman, Professor of Human Evolutionary Biology, Harvard College Professor (on leave 2012-13)
Maryellen Ruvolo, Professor of Human Evolutionary Biology
Primarily for Undergraduates

**OEB 10. Foundations of Biological Diversity**
Catalog Number: 7967  
N. Michele Holbrook and Brian D. Farrell  
Half course (fall term). M., W., F., at 12, and two hours of laboratory/discussion section weekly, including field trips to marine and forest environments. EXAM GROUP: 5  
An integrated approach to the diversity of life, emphasizing how chemical, physical, genetic, ecological and geologic processes contribute to the origin and maintenance of biological diversity. Topics to be covered include the evolution of metabolic pathways, multicellularity and structural complexity; causes and consequences of differences in diversity over space and time; the role of species interactions (including symbioses) as an evolutionary force; and the evolution of humans and their impact on the environment.  
Note: Knowledge of introductory molecular, cellular biology, and genetics is recommended. This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core requirement for Science B.

**OEB 50. Genetics and Genomics**
Catalog Number: 72331  
Kirsten Bomblies and Daniel L. Hartl  
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14  
Fundamental concepts in genetics and genomics forming a critical foundation for biology approached from two perspectives: (1) as a body of knowledge pertaining to genetic transmission, function, mutation, and evolution in eukaryotes and prokaryotes; and (2) as an experimental approach providing a toolkit for the study of biological processes such as development and behavior. Topics include structure, function, transmission, linkage, mutation, and manipulation of genes; genetic approaches in experimental studies of biological processes; and analysis of genomes in individuals and populations. Related ethical issues also discussed include genetically modified organisms, gene therapy, genetic testing, personalized medicine, and genetic privacy.

**OEB 51. Biology and Evolution of Invertebrate Animals**
Catalog Number: 7873 Enrollment: Limited to 12.  
Gonzalo Giribet  
Half course (spring term). Lectures Tu., Th., 10-11:30; laboratory on Wednesdays with hours to be arranged. EXAM GROUP: 12, 13  
Introduction to invertebrate diversity. will cover the development, adult anatomy, biology and evolutionary relationships of the main animal phyla including sponges, mollusks, annelids and arthropods among others. Special emphasis is placed on understanding the broad diversity of animal forms and their adaptations to different ecosystems and how these phenomena shape animal evolution. Lectures will be complemented with a mandatory weekly lab and a field trip to different areas of outstanding marine diversity in the Caribbean.  
Note: Field trip to the Caribbean for research during spring break.  
Prerequisite: OEB 10, OEB 53 or permission of instructor required.
OEB 52. Biology of Plants
Catalog Number: 1343
Elena M. Kramer, Pamela Diggle, and N. Michele Holbrook
Half course (spring term). Tu., Th., 10-11:30, one afternoon laboratory per week, plus occasional field trips. EXAM GROUP: 12, 13
Introduction to the structure, diversity, and physiology of plants with an emphasis on evolutionary relationships and adaptations to life on land. Topics include growth, resource acquisition, interactions with other organisms (i.e., fungi, bacteria, insects), reproduction, and survival in extreme environments. Laboratory sessions provide an overview of plant and diversity and an introduction to basic physiological processes.
Note: This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core area requirement for Science B.

OEB 53. Evolutionary Biology
Catalog Number: 3342
Andrew J. Berry and James Mallet
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
The course covers micro- and macro-evolution, ranging in its focus from population genetics through molecular evolution to the grand patterns of the fossil record. Topics emphasized include both natural and sexual selection, the ecological context of adaptation, genomic and developmental mechanisms of evolutionary innovation, speciation, phylogenetics, and evolutionary approaches to human problems.
Note: This course, when taken for a letter grade, meets the Core requirement for Science B.
Prerequisite: Life Sciences 1b or permission of instructor.

OEB 54. Biology of the Fungi
Catalog Number: 9326
Donald H. Pfister and Anne Pringle
Half course (fall term). Tu., Th., 1-2:30, and a weekly laboratory on Tu., 2:30 -5. EXAM GROUP: 15, 16
This course explores the fascinating diversity of the kingdom fungi, including evolution, ecology and morphology. All of the major groups of fungi, from smuts to molds, will be included. Students use a variety of techniques to learn about these organisms and their activities.
Note: There is a weekly laboratory, and several afternoon field trips are required (dates to be announced). This course, when taken for a letter grade, meets the Core area requirement for Science B.
Prerequisite: Life Sciences 1a and 1b or permission of instructor.

OEB 55. Ecology: Populations, Communities, and Ecosystems
Catalog Number: 3365
Paul R. Moorcroft
Half course (spring term). M., W., F., at 10, and a weekly discussion section, and two field trips on either Saturdays or Sundays during mid-April to early-May. EXAM GROUP: 3
Relationships of organisms to their environment at the individual, population, and community level. Topics in pure and applied ecology including adaptations to physical environment, competition, population dynamics, predator-prey interactions, herbivore effects, community
ecology, ecosystem structure, stability and function, and resource management.  
*Note:* This course, when taken for a letter grade, meets the Core requirement for Science B.  
*Prerequisite:* Mathematics 1b.

**OEB 56. Geobiology and the History of Life - (New Course)**
Catalog Number: 22846  
David T. Johnston and Andrew H. Knoll  
Half course (spring term). M., W., F., at 10, and a weekly three-hour lab to be arranged, and one field trip. EXAM GROUP: 3  
Within our solar system, Earth is distinguished as the planet with life. Life was born of planetary processes, has been sustained for some four billion years by planetary processes, and through time has emerged as a set of planetary processes that is important in its own right. In this course we will investigate the ways that Earth and life interact, focusing in particular on the biogeochemical cycles of major elements. This will provide a framework for interpreting the history of life reconstructed from fossils and phylogeny.  
*Note:* OEB 56 is also offered as EPS 56. Students may not take both OEB 56 and EPS 56 for credit.  
*Prerequisite:* EPS 21, 22, or Life Sciences 1b; or permission of instructor.

**OEB 57. Animal Behavior**
Catalog Number: 2539  
Naomi E. Pierce and Bence P. Olveczky  
Half course (spring term). Tu., Th., at 10; Guest lectures and film screenings W., at 7:30 pm; one hour discussion section weekly. EXAM GROUP: 12  
A review of the behavior of animals under natural conditions, with emphasis on both mechanistic and evolutionary approaches. Topics include classical ethology; behavioral endocrinology; behavioral genetics; learning and memory; communication; orientation, migration and biological rhythms; optimal foraging; evolutionary stable strategies; sexual selection; parental investment and mating systems; selfishness, altruism, and reciprocity; and sociality in vertebrates and invertebrates.  
*Note:* This course, when taken for a letter grade, meets the Core area requirement for Science B.

**OEB 59. Plants and Human Affairs**
Catalog Number: 5281  
Donald H. Pfister and Charles C. Davis  
Half course (fall term). M., W., at 10. EXAM GROUP: 3  
An introduction to the uses of plants by humans. Topics include the form, structure and genetics of plants related to their use as sources of food, shelter, fiber, flavors, beverages, drugs, and medicines. Plant structure and reproduction are studied in lecture and laboratory with a particular focus on relationships between the plant’s structural, chemical, or physiological attributes and the utility plant.  
*Note:* This course, when taken for a letter grade, meets the Core requirement for Science B.  
*Prerequisite:* OEB 10 or permission of the instructor.

**OEB 91r. Supervised Reading**
Catalog Number: 6374
David A. Haig and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading on topics not covered by regular courses. For OEB concentrators, work may be supervised by faculty in other departments, provided it is co-sponsored by an OEB faculty member. For non-concentrators, work must be directed by an OEB faculty member. Students must submit a registration request to the OEB Undergraduate Office before enrollment. Students cannot take OEB 91r and 99r simultaneously with the same director.

*OEB 99r. Supervised Research
Catalog Number: 7744
David A. Haig and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Course taken in one or more semesters to obtain credit for independent research, including research toward a senior thesis. Work should be directed by an OEB faculty member or have an OEB faculty sponsor. All students must submit registration materials for OEB 99r at the time of enrollment.
Note: Laboratory safety session required.

For Undergraduate and Graduates

OEB 100. Evolution in Action
Catalog Number: 9930 Enrollment: Limited to 16.
Christopher Marx
Half course (spring term). M., 4–5:30. EXAM GROUP: 9
In this project based laboratory course students will conduct research utilizing experimental evolution of microbial populations. The research will address questions that synthesize knowledge of genetics, biochemistry, systems biology, microbiology, evolution and ecology.
Prerequisite: Life Sciences 1a and 1b or permission of the instructor required. Open to students from any concentration

OEB 103. Plant Systematics and Evolution
Catalog Number: 8704
Charles C. Davis
Half course (spring term). Tu., Th., 10–11:30, and a four hour lab on Fridays. EXAM GROUP: 12, 13
An introduction to the diversity and evolution of vascular plants. The course focuses mainly on flowering plants because of their dominant role on the earth, but lycophytes, ferns, and gymnosperms are studied as well. A phylogeny of vascular plants provides the framework for their evolution and diversification. Related subjects, including plant habitats, biogeography, phylogenetics, herbaria, nomenclature, and pollination biology are also presented in lecture and laboratory.
Note: There are two midterms, a final, and frequent lab quizzes.
Prerequisite: OEB 10 or permission of instructor.

[OEB 105 (formerly OEB 205). Neurobiology of Motor Control]
Catalog Number: 1519
Bence P. Olveczky  
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
This course explores the functional organization and anatomy of motor circuits in the brain and how they control movements, including simple reflex movements, rhythmic movements, and more complex sequences of learned movements.  
Note: Expected to be given in 2013–14.  
Prerequisite: MCB 80 or equivalent or permission of instructor.

**OEB 106. Plant Development and Differentiation**  
Catalog Number: 4559  
Elena M. Kramer and Pamela Diggle  
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
A comprehensive lecture course on the developmental biology of plants from fertilization through all phases of vegetative and reproductive growth. Material includes both morphological and genetic studies. Although the main focus of the course is angiosperms, examples are drawn from other lineages of land plants as well. Additional topics include control of cell division and elongation, signal transduction, and hormone response.  
Prerequisite: Life Sciences 1b and OEB 52 or permission of the instructor.

**OEB 107. Evolution of Plant Life in Geologic Time**  
Catalog Number: 1318 Enrollment: OEB 107 is also offered as EPS 107. Students may not take both OEB 107 and EPS 107 for credit.  
Andrew H. Knoll  
Half course (fall term). M., W., at 10, and a weekly 2-hour lab to be arranged. EXAM GROUP: 3  
Origin, evolution, dispersal, paleoecology, and geologic history of the major groups of the plant kingdom. Laboratory study of representative groups, living and fossil.  
Prerequisite: OEB 10 or permission of instructor.

**OEB 114. Vertebrate Viviparity**  
Catalog Number: 4953  
David A. Haig  
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4  
Viviparity has evolved many times in vertebrate phylogeny. The course reviews the diversity of parental care in vertebrates and explores the selective forces that have favored the evolution of live-bearing. The evidence for intergenerational conflicts is considered.  
Prerequisite: Life Sciences 1b or permission of instructor.

**OEB 115. Evolutionary Developmental Biology in Animals**  
Catalog Number: 9892  
Arkhat Abzhanov  
Half course (fall term). M., 2–4. EXAM GROUP: 7, 8  
A lecture course in evolutionary developmental biology. Main principles and mechanisms of development as illustrated on both invertebrate and vertebrate animal model systems. In this course we will discuss how animal embryos develop adult body plans on cellular and molecular level. Particular emphasis will be placed on how knowledge of developmental biology helps us
understand major evolutionary transitions and the origin of innovation in animal evolution. 

Prerequisite: Life Sciences 1a (or LPS A) and 1b, or permission of instructor. OEB 10, MCB 52, and MCB 54 are recommended but not required. Open to students from any concentration.

**[OEB 117. The Mathematics of Evolution]**
Catalog Number: 11415
Michael Manish Desai
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
The quantitative basis of evolutionary theory: models of natural selection, mutations, and genetic drift at a single locus; multilocus problems in evolutionary dynamics including topics such as Muller’s ratchet, hitchhiking, quasi-linkage equilibrium and strong linkage approximations; evolution of recombination and mutation rates and other modifiers of evolvability; an introduction to genealogical approaches; inference in population genetics; evolution in structured populations; and interactions between ecology, epidemiology, and evolution.

Note: Expected to be given in 2013–14.
Prerequisite: Mathematics through calculus and familiarity with differential equations and probability.

**[OEB 118. Biological Oceanography]**
Catalog Number: 7752
James J. McCarthy
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
The ocean as an ecological system, with focus on environmental-organismal interactions that regulate plankton production and transfer to higher trophic levels. Specific topics include bloom events, the limits to fish harvest, and the effects of climate change on ocean systems. Plankton demonstrations and optional coastal research vessel day trip.

Note: Expected to be given in 2013–14. For biology and other natural science concentrators.
Prerequisite: OEB 10, Physical Sciences 1 or permission of instructor.

**[OEB 119. Deep Sea Biology]**
Catalog Number: 1397
Peter R. Girguis
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
The oceans contain 97% of Earth’s water, and host the most disparate ecosystems on the planet. This course provides an introduction to deep ocean habitats, macrofauna and microorganisms. Emphasis is placed on the physiological adaptations of organisms to their environment, as well the role of microbes in mediating oceanic biogeochemical cycles.

Note: Expected to be given in 2013–14.

**[OEB 121a. Research in Comparative Biomechanics: Seminar]**
Catalog Number: 4049
Andrew A. Biewener, Stacey A. Combes, George V. Lauder, and Anna G. Warrener
Half course (spring term). Hours to be arranged.
Introduces students to experimental techniques used to investigate the structure and physiology of animals. Each instructor offers research projects that are undertaken in their laboratory (limit 5 students per instructor). Students meet to introduce their project, discuss their work and progress,
and to present their final results. An extensive commitment of time in the laboratory is required. Grades are based on the work completed, the oral presentation, and a short research paper.

Note: Laboratory safety session required.

Prerequisite: Life Sciences 2 or OEB 102 or equivalent preferred.

**[OEB 123. Biology of Symbiosis]**

Catalog Number: 0508

Colleen M. Cavanaugh

Half course (spring term). Hours to be arranged.

An examination of the major aspects of microbial endosymbiosis with emphasis on mutualisms, although some parasitic interactions are covered. Topics include origins of the eukaryotic cell, specificity and recognition of partners, distribution and diversity of associations, and coevolution of host and symbiont. The course covers symbiotic interactions among bacteria and archaea with protists, fungi, plants, and animals, including the human microbiome.

Note: Expected to be given in 2013–14.

Prerequisite: Life Sciences 1b, OEB 10, and MCB 52 or equivalent, or permission of instructor.

**[OEB 125. Molecular Ecology and Evolution]**

Catalog Number: 2691

Scott V. Edwards

Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

A survey of theory and applications of DNA technologies to the study of evolutionary, ecological and behavioral processes in natural populations. Topics to be covered will span a variety of hierarchical levels, timescales, and taxonomic groups, and will include the evolution of genes, genomes and proteins; the neutral theory of molecular evolution and molecular clocks; population genomics and phylogenetic principles of speciation and phylogeography; metagenomics of microbial communities; relatedness and behavioral ecology; molecular ecology of infectious disease; and conservation genetics.

Note: Expected to be given in 2013–14. Weekly computer laboratories will introduce the use of the internet and computational software in DNA sequence alignment and phylogenetic and population genetic analysis.

Prerequisite: Life Sciences 1b, OEB 10, OEB 53 or MCB 52.

**OEB 130. Biology of Fishes**

Catalog Number: 4624

George V. Lauder

Half course (spring term). M., W., 11–12:30. EXAM GROUP: 4, 5

Fishes inhabit diverse aquatic environments including deep seas, intertidal zones, coral reefs, polar waters, the vast Amazonian basin, and great East African lakes. A single fish species may occupy diverse environments through extraordinary long distance horizontal and vertical migrations. To explore this unparalleled diversity, the course emphasizes bridging traditional academic boundaries with integrative analyses of the biology underlying rapid evolutionary radiations and stasis.

**[OEB 132. Tropical Plant Ecophysiology]**

Catalog Number: 61306
N. Michele Holbrook  
*Half course (spring term). M., 1–4. EXAM GROUP: 6, 7, 8*

An introduction to the ecology and physiology of South America ecosystems, with an emphasis on how physiological processes contribute to plant diversity and ecosystem functioning. Lectures and hands-on laboratory sessions will explore how rainforest, cerrado, caatinga, seasonally dry forests, mangroves, paramo, cold and warm desert plants obtain the water, nutrients and CO2 needed for them to carry out photosynthesis. The course will cover basic physiological processes, as well as environmental conditions of the major South American biomes and ecosystems.

*Note:* Expected to be given in 2013–14. Course meets on alternate weeks at the Arnold Arboretum.

*Prerequisite:* One half course in OEB or permission of the instructor.

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**[OEB 141. Biogeography]**

*Catalog Number: 85974*

**Gonzalo Giribet**  
*Half course (spring term). M., W., 2–3:30. EXAM GROUP: 7, 8*

Biogeography aims to explain distributions of organisms through historical and ecological factors. This course will focus on the history of biogeographic research, developments in the area of historical biogeography, and on ecological processes that affect distributions of whole clades. Topics include plate tectonics and earth history, vicariance and dispersal, areas of endemism, phylogenetic niche conservatism, latitudinal gradients in species richness, and the theory of island biogeography. Software for biogeographical analysis will be discussed and evaluated.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Two following courses: Life Sciences 1b, OEB 10, OEB 51, OEB 52, OEB 53, OEB 54, OEB 55, OEB 181, or permission of the instructor.

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**OEB 145. Genes and Behavior**

*Catalog Number: 48436*

**Yun Zhang**  
*Half course (fall term). M., W., 3–4:30. EXAM GROUP: 8, 9*

Behavior is inheritable and regulated by genes. This lecture course explores the causal links between the genes encoded in the genome and various behaviors, aiming to provide mechanistic understandings on how gene products control and influence behavioral outputs. The topics of the lectures cover both important findings as well as major research approaches in the field. The behavioral traits in discussion include olfaction, mechanosensation, foraging, circadian rhythm, aggression, courtship, sleep, social recognition, learning and memory, etc. The organisms that we will discuss include invertebrates, vertebrates and humans.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Science B.

*Prerequisite:* Life Science 1a.

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**[OEB 150. Vertebrate Evolution and Development]**

*Catalog Number: 62937*

**Arkhat Abzhanov**  
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*

A survey of the evolution and development of major groups of vertebrates, integrating the
paleontological record of the origin of chordates, diverse fishes, amphibians, reptiles, birds, and mammals with current understanding of the genetic, cellular and developmental mechanisms that underlie these transformations.

Note: Expected to be given in 2013–14. Not open to students who have taken OEB 139.

[OEB 153. Statistics for Biology]
Catalog Number: 49559
John Wakeley
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
Introduction to probability and statistical distributions, and the principle and practice of statistical inference, with a focus on genetical and other biological applications; in other words, how to defend your claims and not be fooled by quantitative arguments.

Note: Expected to be given in 2013–14. This course is offered every other year.

Prerequisite: Mathematics through Calculus.

[*OEB 155r. Biology of Insects*]
Catalog Number: 2346 Enrollment: Limited to 15.
Naomi E. Pierce and Michael R. Canfield
Half course (fall term). W., F., 1:30–3. EXAM GROUP: 6, 7
An introduction to the major groups of insects. The life history, morphology, physiology, and ecology of the main taxa are examined through a combination of lecture, lab, and field exercises. Topics include the phylogeny of terrestrial arthropods with a review of the extant orders, an analysis of abiotic and biotic factors regulating populations, including water balance, temperature, migration, parasitism, mutualism, sociality, insect/plant interactions, medical entomology, and the use of insects in biological control.

Note: Expected to be given in 2013–14.

Prerequisite: With permission of instructor.

[OEB 157. Global Change Biology]
Catalog Number: 7055
Paul R. Moorcroft and James J. McCarthy
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Examines natural and anthropogenic changes in the earth system and their impact on the structure and functioning of terrestrial and oceanic ecosystems. Topics include earth system history, fossil fuel emissions, changing water chemistry, ozone, species extinctions and invasions, and human exploitation of natural resources.

Note: Expected to be given in 2013–14.

Prerequisite: OEB 10 or OEB 53 and Mathematics 1a required. OEB 55 (formerly BS 55) recommended.

[OEB 167. Herpetology]
Catalog Number: 4070
James Hanken and Jonathan Losos
Half course (spring term). Tu., Th., 1-2:30; Lab: W., 2:30-5:30. EXAM GROUP: 15, 16
An introduction to the biology of amphibians and reptiles. Lectures and laboratories examine the morphology, systematics, natural history, behavior, ecology, evolutionary relationships, and
biogeography of all major taxa.

*Note:* Expected to be given in 2013–14. The course is planning an optional week-long field trip during spring break.

**OEB 168r. Sociobotany**
Catalog Number: 5092
David A. Haig

*Half course (spring term). F., 9–11. EXAM GROUP: 2, 3*
A study of the diversity and evolution of plant life cycles, with an emphasis on interactions between the generations. The course will focus on bryophytes.

*Prerequisite:* Permission of instructor.

**[OEB 173. Comparative Biomechanics]**
Catalog Number: 9667
Andrew A. Biewener

*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
An exploration of how animals and plants contend with their physical environment, considering their biomaterial properties, structural form, and mechanical interaction with the environment. Through lectures, seminar discussions, and student presentations based on readings, students are introduced to topics related to biomechanical performance.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Mathematics 1b, Physical Science 2 or Physics 11a; Mathematics 21a recommended, or permission of instructor.

**[OEB 181. Systematics]**
Catalog Number: 5459
Gonzalo Giribet

*Half course (spring term). Tu., Th., 10-11:30; laboratory on Wednesdays with hours to be arranged. EXAM GROUP: 12, 13*
Theory and practice of systematics, emphasizing issues associated with homology statements and alignments, methods of tree reconstruction, and hypothesis evaluation. The course combines theoretical considerations, paying special attention to algorithmic aspects of phylogenetics, with the use of different computer programs for conducting evolutionary and phylogenetic analyses.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* OEB 53, LS1b or permission of instructor required. Familiarity with computers, especially PC platforms.

**[OEB 185. Genetic Conflict]**
Catalog Number: 98102
Kirsten Bomblies

*Half course (spring term). Hours to be arranged.*
Some genes cheat random inheritance to gain disproportionate representation in progeny. The results for organisms range from beneficial to strongly detrimental; some may even cause extinction. The evolution of selfish elements and their suppressors is a rich drama that unfolds in genomes with important implications for evolution, speciation, human and animal health, and agriculture. This course will explore the mechanisms by which genes or chromosomes cheat, and
counterstrategies that evolve to thwart them.  
*Note:* Expected to be given in 2013–14.

[**OEB 190. Biology and Diversity of Birds**]  
Catalog Number: 3870  
Enrollment: Limited to 12.  
*Scott V. Edwards*  
**Half course (spring term). Tu., Th., 11:30-1, and two hours weekly of specimen laboratory.**  
**EXAM GROUP: 13, 14**  
An introduction to the biology of birds. Covers the fossil record and theories for avian origins, physiology and anatomy, higher-level systematics and field characters of the ~27 orders, speciation processes, nesting and courtship behavior, vocalizations, mating systems and sexual selection, cooperative breeding, demography and conservation. Optional field trip during spring break. Laboratories will consist of gross anatomy, bird watching excursions in the Cambridge area, field techniques and specimen preparation, and systematic study of avian groups using the collections of the Museum of Comparative Zoology.  
*Note:* Expected to be given in 2013–14.  
*Prerequisite:* OEB 10 or OEB 53 or permission of the instructor.

[**OEB 191. Physiological and Biochemical Adaptation**]  
Catalog Number: 2314  
*Peter R. Girguis, Stacey A. Combes, and Alain Viel*  
**Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13**  
This course examines how microbes and animals have evolved to maintain function throughout the wide range of extant habitats. Emphasis is on physiological/biochemical evolution in response to environmental conditions, including climate change and life in extreme environments. As the first course in the "genomes to biomes" series, we will examine new approaches to interrogating organismal physiology in nature. Those interested can continue the "genomes to biomes" program via LS 100r.  
*Note:* Expected to be given in 2013–14. One lab per week.  
*Prerequisite:* OEB 10 or CHEM 27 or permission of the instructor.

[**OEB 192. Microbial Evolution**]  
Catalog Number: 5019  
*Christopher Marx*  
**Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7**  
An examination of the evolution of microbes through an integration of lectures and discussion of primary literature. We will focus on a series of broad questions for which we will draw upon knowledge from both lab-based study of experimental microcosms and comparative studies of natural populations. Notably, students will conduct their own experimental evolution projects using 'digital organisms'.  
*Prerequisite:* Life Sciences 1a and Life Sciences 1b or equivalent required.

[**OEB 194. Laboratory Techniques in Ecological Physiology**]  
Catalog Number: 19882  
*Peter R. Girguis and Stacey A. Combes*  
**Half course (spring term). Hours to be arranged.**
An introduction to laboratory techniques in experimental physiology, this course will utilize a variety of equipment and several model organisms to empirically investigate foundational concepts in physiological and biochemical adaptation. Labs will complement and extend topics discussed in the companion class, OEB191. After demonstrating proficiency with core techniques, students will design independent research projects to explore novel questions in ecological physiology.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Concurrent or previous enrollment in OEB 191, or instructor approval.

**Primarily for Graduates**

**OEB 209. Oxygen and Life**
Catalog Number: 67224
*Andrew H. Knoll and Peter R. Girguis*
Half course (fall term). W., 12–2. EXAM GROUP: 5, 6
In this seminar, we will explore the molecular and physiological interactions between organisms and oxygen, and use these to shed light on the role of oxygen in modulating evolutionary change through Earth history.

*Prerequisite:* One of the following: OEB 191, EPS 181, EPS 186; or permission of instructors

**OEB 210. Writing Scientific Papers - (New Course)**
Catalog Number: 37244 Enrollment: Limited to 12.
*Andrew Richardson*
Half course (fall term). M., 2–5. EXAM GROUP: 7, 8, 9
You’ve designed your experiment, made your measurements, and analyzed your data. Now what? How do you write a paper that will not only get accepted, but also get cited? This is a hands-on workshop course targeted at graduate students who are ready to write up their first research paper for submission to a peer-reviewed scientific journal. The class will emphasize the idea that your paper should tell a (nonfiction!) story that engages the reader. By the end of the semester you will have a coherent, well-structured, and polished manuscript.

**OEB 212r. Advanced Topics in Plant Physiology**
Catalog Number: 2176
*N. Michele Holbrook*
Half course (spring term). Tu., at 3. EXAM GROUP: 17
This seminar/discussion course will focus on new research on how the plant hormone abscisic acid (ABA) affects a wide range of physiological processes including stomatal regulation, leaf and root hydraulic conductivity, developmental responses to drought, seed maturation and dormancy, leaf senescence, and bud dormancy. The idea is to use ABA as an entry point for considering how plants integrate physiological and developmental responses to stress. 

*Note:* Motivated undergraduates are welcome! No required background, although students will be expected to read and discuss current literature in plant biology. Appropriate background readings (and discussion) will be provided.

*Prerequisite:* OEB 120 , OEB 52 or permission of instructor.
[*OEB 214. Biology of Acoustic Communities*]
Catalog Number: 2422 Enrollment: Limited to 12.
Brian D. Farrell
*Half course (spring term). Tu., 11:30–1. EXAM GROUP: 13, 14*
Four principal animal groups (insects, frogs, birds and mammals) sing and call in habitats around the world. We discuss the ecology, evolution and characteristics of such acoustic communities and the hypothesis that their members compete for "bandwidth". We discuss readings on acoustic ecology and evolution, and listen to (and watch, via spectrum analysis) soundscapes from selected tropical and temperate habitats. The capstone will be a fieldtrip to record natural soundscapes.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* OEB 10 or permission of the instructor.

[OEB 215. Topics in Ecophysiology]
Catalog Number: 99294
Stacey A. Combes
*Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18*
A discussion based course exploring the physiological processes involved in an organism’s interactions with its environment. Readings will focus on adaptation to environmental variability, with an emphasis on responses to climate change and habitat alteration.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* OEB 191 or permission of instructor

*[OEB 220r. Writing fellowship and grant proposals for the biological sciences]*
Catalog Number: 15907
Stacey A. Combes
*Half course (fall term). W., 9–11. EXAM GROUP: 2, 3*
This course will prepare graduate students to write NSF-style proposals through in-class exercises, group analysis of writing samples, talks by former NSF panel members, and writing assignments geared towards meeting November proposal deadlines.

[OEB 221. Microbial Diversity]
Catalog Number: 1234
Colleen M. Cavanaugh
*Half course (spring term). Hours to be arranged.*
Examines the remarkable diversity of prokaryotes. Physiological, genetic, ecological, and evolutionary characteristics of Bacteria and Archaea divisions are discussed, as well as the relation of phenotype to phylogeny.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Life Sciences 1b (formerly BS 50) and OEB 10 or BS 51, and MCB 52 or equivalent, or permission of instructor.

[OEB 223. Topics in Neurogenetics]
Catalog Number: 1434
Yun Zhang
*Half course (spring term). W., 2–3:30. EXAM GROUP: 7, 8*
We will discuss current literatures related to genetic effects on neural functions, including: (1) mental illness; (2) neurodegenerative diseases; (3) various behaviors; (4) learning and memory.

Note: The course is primarily planned for new graduate students, but it is also open to interested senior undergraduates who have taken OEB 57 (formerly BS 57) or MCB 80 and obtained permission from the instructor.

**[OEB 227. Molecular Approaches to Environmental Microbiology]**
Catalog Number: 4444  
Colleen M. Cavanaugh  
Half course (spring term). Hours to be arranged.  
Critical review and discussion of current advances in our understanding of biodiversity, community structure, and metabolic activities in Bacteria and Archaea resulting from the application of cellular and molecular approaches in diverse environments  
Note: Expected to be given in 2013–14.  
Prerequisite: Earth and Planetary Sciences 30 or permission of instructor.

**[*OEB 230. Speciation, Genomics, and Ecology]*
Catalog Number: 0122  
James Mallet  
Half course (spring term). Hours to be arranged.  
This discussion based course covers the latest advances in speciation with a focus on controversial issues and new approaches. The course combines readings from Speciation chapters and the recent primary literature with guest lecturers and discussion from experts in the field.  
Note: Expected to be given in 2013–14.  
Prerequisite: Permission of instructor.

**[*OEB 231. Adaptation]*
Catalog Number: 95671  
Hopi E. Hoekstra  
Half course (spring term). M., 2–4. EXAM GROUP: 8  
This discussion-based course covers the latest advances in the study of adaptation with a focus on controversial issues and integrative approaches. The course combines readings from recent primary literature with discussion with experts via video conferencing.  
Note: Expected to be given in 2013–14.

**[OEB 234. Topics in Marine Biology]**
Catalog Number: 4637  
Robert M. Woollacott  
Half course (spring term). W., 2:30–5. EXAM GROUP: 7, 8, 9  
Human impacts on marine life and ecosystems of the sea.  
Note: Weekly class meeting including lectures, class presentations, several laboratories, and one field trip through the course of term.

**OEB 242. Population Genetics**
Catalog Number: 0903
Daniel L. Hartl, Michael Manish Desai, and Pardis Sabeti
Half course (spring term). W., 2–5. EXAM GROUP: 7, 8, 9
Mathematical theory, experimental data, and history of ideas in the field, including analytical methods to study genetic variation with applications to evolution, demographic history, agriculture, health and disease. Includes lectures, problem sets, and student presentations. Prerequisite: LS1b or permission of the instructor.

*OEB 251. Introduction to Vertebrate Surgery
Catalog Number: 2075 Enrollment: Limited to 16.
Arthur L. Lage (Medical School)
Half course (fall term). W., 1-3, and a weekly lab, W., 3-6. EXAM GROUP: 6, 7
Teaches the basic principles of aseptic surgery with emphasis on practicality. Students learn basic "open" surgery as well as newer high-tech videoscopic minimally invasive technique, obtaining hands-on experience in scrubbing, gowning, and sterile technique while serving as anesthetist and surgeon.
Note: Intended for the student interested in the application of surgical technique in higher studies in biology and related disciplines.
Prerequisite: Comparative anatomy, Life Sciences 2 (or OEB 102), or equivalent course.

OEB 252. Coalescent Theory
Catalog Number: 0118
John Wakeley
Half course (fall term). M., W., F., at 9. EXAM GROUP: 2
The mathematics and computation of ancestral inference in population genetics. Theory relates observable genetic data to factors of evolution such as mutation, genetic drift, migration, natural selection, and population structure.
Prerequisite: OEB 242 or permission of instructor: calculus and statistics or probability.

OEB 253r. Evolutionary Genetics Seminar
Catalog Number: 8104
John Wakeley
Half course (spring term). W., at 11. EXAM GROUP: 4
Readings and discussion of primary literature in population and evolutionary genetics.
Prerequisite: OEB 152 or permission of instructor.

OEB 255. Nature and Regulation of Marine Ecosystems
Catalog Number: 7753
James J. McCarthy and guest lecturers
A presentation of topics that are of current interest in marine ecosystems. Emphasis on identification and quantification of biological and environmental factors important in the regulation of community structure.
Prerequisite: OEB 118 or OEB 157.

OEB 261r (formerly Biology 261r). Developmental Mechanisms of Evolutionary Change
Catalog Number: 8451
Arkhat Abzhanov

Half course (spring term). F., 2–4. EXAM GROUP: 7, 8
This lecture-seminar course will consider how mechanisms of animal developmental genetics help to explain the scope and patterns of animal diversity. Particular emphasis is placed on major evolutionary transitions and the origin of innovations.
Prerequisite: LS 1A and LS 1B or by permission of the instructor.

OEB 264. Sustainability Science: Interactions between Human and Environmental Systems
Catalog Number: 16239
William C. Clark (Kennedy School) and N. Michele Holbrook
Half course (fall term). Tu., Th., 1:10–2:30.
A research seminar on how core theories of sustainability science provide a framework for improving the well-being of present and future generations in ways that conserve the planet’s life support systems. The seminar will engage in a critical discussion of the underlying theory of the field and evaluate case studies of efforts to manage particular coupled human-environment systems.
Note: Expected to be given in 2013–14. Offered jointly with the Kennedy School as IGA-944.

[OEB 268r. Topics in Plant Developmental Genetics]
Catalog Number: 5020
Pamela Diggle
Half course (fall term). Tu., Th., 1-2:30, with Lab on Thursdays, 3-5. EXAM GROUP: 15, 16
This lecture/laboratory covers plant anatomy and development, including the structure and function of cells, tissues, and organs and their developmental origin at the shoot apical meristem. Techniques of histology and microscopy also are covered.
Note: Expected to be given in 2013–14.
Prerequisite: OEB 106 and Life Sciences 1b or BS 50, or MCB 52 or permission of instructor.

OEB 275br. Evolutionary Genomics and the Museum: Enhancing insight into evolutionary processes using museum collections - (New Course)
Catalog Number: 82827
Scott V. Edwards and James Hanken
Half course (spring term). Tu., 1–3, and occasional alternate times to accommodate video casts. EXAM GROUP: 15
This semester we will explore through lectures, videocasts and discussion the ways in which museum collections and online museum databases can enhance modern studies of genomic and geographic variation. Lecture topics will review the state of the art with regard to using genomics to study geographic variation, and in-class demonstrations will link such studies to museum and biodiversity databases and explore the reciprocal benefits of doing so. Some lectures will be held remotely and given by video by scientists at institutions participating in AIM-UP!, a NSF-funded multi-institution research network aimed at enhancing undergraduate education through museum collections.
Prerequisite: OEB 10, OEB 53, or equivalent.
**OEB 275r. Phylogenomics, Comparative Genomics and Adaptation**

Catalog Number: 5004  
Scott V. Edwards  

_Half course (fall term). Th., 2–4, and occasional computer labs. EXAM GROUP: 16, 17_

This semester we will explore through lectures and discussion ways in which museum collections and online museum databases can enhance modern studies of genomic and geographic variation. Lecture topics will review the state of the art with regard to using genomics to study geographic variation, and in-class demonstrations will link such studies to museum and biodiversity databases and explore the reciprocal benefits of doing so. Some lectures will be held remotely and given by video by scientists at institutions participating in AIM-UP!, a NSF-funded multi-institution research network aimed at enhancing undergraduate education through museum collections (http://www.aim-up.org/home).  

*Prerequisite:* OEB 53, OEB 181, OEB 125 or equivalent.

[*OEB 277. In Sickness and in Health: Topics in Symbiosis*]

Catalog Number: 37264  
Colleen M. Cavanaugh  

_Half course (spring term). W., 1–3. EXAM GROUP: 6, 7_

Critical review and discussion of current issues in symbiosis. Emphasis is on microbe-eukaryote symbioses ranging from mutualistic to pathogenic associations. In 2011 the course will focus on the human microbiome and topics selected by faculty and students.  

*Note:* Expected to be given in 2013–14.  

*Prerequisite:* Life Sciences 1a, 1b or equivalent, microbial science, or permission of instructor.

**OEB 282. Genomics and Evolution of Infectious Disease (Graduate Seminar in General Education)**

Catalog Number: 43026  
Pardis Sabeti  

_Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17_

Infectious diseases rapidly evolve to evade our immune systems, drugs, and vaccines, to remain agents of great morbidity and mortality. We will investigate the genome evolution of these pathogens and our intervention strategies for them past and present, with case examples from avian flu, malaria, TB, lassa fever and more. The seminar will design and develop a General Education course on these themes for undergraduates.  

*Note:* Expected to be given in 2013–14.

*OEB 290 (formerly *Life Sciences 190r). Microbial Sciences: Chemistry, Ecology and Evolution*  

Catalog Number: 7185 Enrollment: Limited to 30.  
Michael S. Gilmore (Medical School)  

_Half course (spring term). F., at 8:30, F., 9:45–11:45. EXAM GROUP: 2_

This is an interdisciplinary graduate-level and advanced undergraduate-level course in which students explore topics in molecular microbiology, microbial diversity, and microbially-mediated geochemistry in depth. This course will be taught by faculty from the Microbial Sciences Initiative. Topics include the origins of life, biogeochemical cycles, microbial diversity, and ecology.
Note: Co-listed as Microbiology 210
Prerequisite: For advanced undergraduates, Life Sciences 1a and 1b are required, or permission of instructor. MCB 52 is recommended.

[*OEB 296. Conservation History, Values, and Law]
Catalog Number: 17821
Jonathan Losos and David R. Foster
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Designed for students in ecology and evolution. Through readings and discussion we examine the history of the conservation/preservationist movements. We focus on how various constituencies value nature, and the legal system for protecting nature.
Note: Expected to be given in 2013–14.

*OEB 299r. Forest Practice and Research
Catalog Number: 6128
David R. Foster
Half course (fall term; repeated spring term). Hours to be arranged.
Field and laboratory research into the history, biology, ecology, culture, and economic problems of local, regional, and world forests. Individual research projects.
Note: Seminars, conferences, field, and laboratory work at the Harvard Forest, Petersham, Massachusetts.

Cross-listed Courses

[Earth and Planetary Sciences 181. Historical Geobiology]
[*Environmental Science and Public Policy 90e. Conservation Biology]
[Human Evolutionary Biology 1420. Human Evolutionary Anatomy]
*Human Evolutionary Biology 1463. Molecular Evolution of the Primates
Life Sciences 1b. An Integrated Introduction to the Life Sciences: Genetics, Genomics, and Evolution
Life Sciences 2. Evolutionary Human Physiology and Anatomy
Mathematics 153. Mathematical Biology-Evolutionary Dynamics
Mathematics 243 (formerly Mathematics 234). Evolutionary Dynamics
*MCB 162. Major Advances in Understanding Heredity and Evolution - (New Course)
MCB 291. Genetics, Genomics and Evolutionary Biology

Graduate Courses of Reading and Research

*OEB 303. Theoretical Population Genetics
Catalog Number: 4248
John Wakeley 5680

*OEB 304. Mycology
Catalog Number: 4702
Donald H. Pfister 4344
*OEB 305. The Fundamental Interconnectedness of All Things
Catalog Number: 3647
David A. Haig 1629

*OEB 307. Biomechanics, Physiology and Musculoskeletal Biology
Catalog Number: 2831
Andrew A. Biewener 1446

*OEB 308. Evolution of Floral Developmental Mechanisms
Catalog Number: 5535
Elena M. Kramer 3791

*OEB 310. Metazoan Systematics
Catalog Number: 3975
Gonzalo Giribet 3854

*OEB 311. Ecosystem Ecology
Catalog Number: 6416
Paul R. Moorcroft 4174

*OEB 320. Biomechanics and Evolution of Vertebrates
Catalog Number: 8915
George V. Lauder 2375

*OEB 324. Molecular Evolution
Catalog Number: 2356
Daniel L. Hartl 3278

*OEB 325. Marine Biology
Catalog Number: 4643
Robert M. Woollacott 4135

*OEB 334. Behavioral Ecology
Catalog Number: 8279
Naomi E. Pierce 2889 (on leave fall term)

*OEB 335. Ichthyology and Functional Anatomy of Fishes
Catalog Number: 4640
Instructor to be determined

*OEB 339. Whole-Plant Physiology
Catalog Number: 5214
N. Michele Holbrook 1220
*OEB 341. Coevolution
Catalog Number: 2998
*Brian D. Farrell 1985*

*OEB 343. Microbial Ecology and Symbiosis
Catalog Number: 1288
*Colleen M. Cavannah 2538 (on leave 2012-13)*

*OEB 345. Biological Oceanography
Catalog Number: 4676
*James J. McCarthy 4343*

*OEB 355. Evolutionary Developmental Biology
Catalog Number: 9192
*James Hanken 2719*

*OEB 357. Population Biology and Mathematical Biology
Catalog Number: 5392
*William H. Bossert 1049*

*OEB 359. Paleobotany
Catalog Number: 0248
*Andrew H. Knoll 7425*

*OEB 361. Somatic Evolution of Cancer
Catalog Number: 5791
*Martin A. Nowak 4568*

*OEB 362. Research in Molecular Evolution
Catalog Number: 2367
*Scott V. Edwards 5049*

*OEB 363. Plant Diversity and Evolution
Catalog Number: 0001
*Charles C. Davis 5263*

*OEB 364. Ecological Physiology of Microbes
Catalog Number: 0002
*Peter R. Girguis 5264*

*OEB 365. Evolution of Microbes
Catalog Number: 0003
*Christopher J. Marx 5265*
*OEB 366. Evolution, Ecology, and Fungi  
Catalog Number: 0004  
*Anne Pringle 5266

*OEB 367. Evolutionary and Ecological Diversity  
Catalog Number: 0420  
*Jonathan Losos 5449 (on leave spring term)

*OEB 368. Oral Developmental Biology  
Catalog Number: 7087  
*Arkhat Abzhanov 5597

*OEB 369. Molecular Genetics of Neuroscience  
Catalog Number: 5175  
*Yun Zhang 5780

*OEB 370. Mammalian Evolutionary Genetics  
Catalog Number: 3072  
*Hopi E. Hoekstra 5814 (on leave fall term)

*OEB 371. Comparative and Evolutionary Invertebrate Developmental Biology  
Catalog Number: 7188  
*Cassandra G. Extavour 6035 (on leave spring term)

*OEB 372. Neural Basis of Learned Motor Behaviors  
Catalog Number: 8438  
*Bence P. Olveczky 6003

*OEB 373. Plant Population Biology  
Catalog Number: 34452  
*Kirsten Bomblies 6337

*OEB 375. Evolutionary Dynamics and Population Genetics  
Catalog Number: 60662  
*Michael Manish Desai 6547

*OEB 376. Insect Biomechanics and Behavioral Ecology  
Catalog Number: 75769  
*Stacey A. Combes 6030

*OEB 378. Terrestrial Ecology  
Catalog Number: 24247  
*Andrew Richardson 6562
**OEB 385. Natural Selection in Humans and Pathogens**
Catalog Number: 39354
*Pardis Sabeti 6022*

**OEB 386. Organismic and Evolutionary Plant Biology**
Catalog Number: 55867
*William Friedman 6896*

**OEB 399. Topics in Organismic and Evolutionary Biology**
Catalog Number: 0764
*John Wakeley 5680*

*Half course (fall term; repeated spring term). W., 5-7 pm.*

Presents the research interests and experiences of scientists in organismic and evolutionary biology. Specific topics treated vary from year to year.

*Note:* Required of all first-year graduate students in Organismic and Evolutionary Biology.

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**Philosophy**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

**Faculty of the Department of Philosophy**

Sean D. Kelly, Professor of Philosophy (*Chair* (*on leave spring term*)
Edward J. Hall, Professor of Philosophy (*Acting Chair-spring term*)
Selim Berker, Assistant Professor of Philosophy
Matthew Boyle, Professor of Philosophy
Cheryl K. Chen, Senior Lecturer on Philosophy
Warren Goldfarb, Walter Beverly Pearson Professor of Modern Mathematics and Mathematical Logic (*Head Tutor*)
Güven Güzeldere, Senior Lecturer on Philosophy and Psychology
Russell Edward Jones, Assistant Professor of Philosophy
Frances Kamm, Professor of Philosophy
Peter Koellner, Professor of Philosophy (*on leave 2012-13*)
Christine M. Korsgaard, Arthur Kingsley Porter Professor of Philosophy
Douglas Lavin, John L. Loeb Associate Professor of the Humanities
Jeffrey K. McDonough, John L. Loeb Associate Professor of the Humanities
Richard Moran, Brian D. Young Professor of Philosophy (*Acting Director of Graduate Studies*)
Bernhard Nickel, Associate Professor of Philosophy
Mark Richard, Professor of Philosophy (*on leave fall term*)
Amelie Rorty, Lecturer on Philosophy  
Thomas M. Scanlon, Jr., Alford Professor of Natural Religion, Moral Philosophy, and Civil Polity (on leave 2012-13)  
Amartya Sen, Lamont University Professor  
Tommie Shelby, Professor of African and African American Studies and of Philosophy  
Susanna Siegel, Edgar Pierce Professor of Philosophy (on leave 2012-13)  
Alison Simmons, Samuel H. Wolcott Professor of Philosophy, Harvard College Professor (on leave 2012-13)

**Other Faculty Offering Instruction in Philosophy**

Richard H. Fallon, Ralph S. Tyler, Jr. Professor in Constitutional Law (*Harvard Law School*)

**Affiliates of the Department of Philosophy**

Gennaro Chierchia, Haas Foundations Professor of Linguistics (on leave spring term)  
Michael E. Rosen, Professor of Government

**Primarily for Undergraduates**

**Philosophy 3. Introduction to the Problems of Philosophy**
Catalog Number: 1996  
*Bernhard Nickel*  
*Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4*  
An introduction to philosophy. We will focus on the three main areas of concern: epistemology (the theory of knowledge), metaphysics (the theory of the nature of reality), and ethics (the theory of what we ought to do). You’ll be exposed to philosophical modes of argument and inquiry. The course aims as much at developing the skills involved in pursuing these and other philosophical concerns as to acquaint you with particular positions.

**Philosophy 7. Introduction to Ancient Philosophy**
Catalog Number: 1583  
*Russell Edward Jones*  
*Half course (spring term). M., W., (F.), at 11. EXAM GROUP: 4*  
A survey of ancient Greek philosophy, with an emphasis on Socrates, Plato, and Aristotle. Topics include: the nature of reality, and how we come to know it; the nature and value of wisdom and virtue, and how we might come to attain them; and the good life for human beings, with special attention to the place of justice and friendship in it.

[**Philosophy 8. Introduction to Early Modern Philosophy**]  
Catalog Number: 8947  
*Alison Simmons*  
*Half course (spring term). Hours to be arranged.*  
A survey of 17th- and 18th-century philosophy with a focus on the major metaphysical and epistemological writings of Descartes, Locke, Hume, and Kant. Topics include the natures of mind and body, the existence of God, the existence of the external world, the nature and limits of
human knowledge, and the changing relationship between science and philosophy.

*Note:* Expected to be given in 2013–14.

**Philosophy 19. Introduction to Philosophy of Religion - (New Course)**
Catalog Number: 20223
Cheryl K. Chen

*Half course (fall term). Tu., Th., at 11. EXAM GROUP: 13*

An examination of some central themes in the philosophy of religion. Topics include: arguments for and against the existence of God, divine attributes, the problem of evil, miracles, religious experience, the relation between religion and science, and life and death. Readings from historical and contemporary sources.

**Philosophy 22. Introduction to Philosophy of Psychology - (New Course)**
Catalog Number: 54404
Güven Güzeldere

*Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13*

An introduction to philosophical questions in psychology and the cognitive sciences: the nature of consciousness, the relation between perception, cognition, and introspection, the pertinence of language for rational thought, and the role of memory for personal identity and the self. We also examine related questions, such as how we can study the content of minds in non-human animals and assess the possibility of minds in robots, as well as how certain brain dysfunctions affect the mind and the self.

**Philosophy 91r. Supervised Reading and Research**
Catalog Number: 9710
Warren Goldfarb

*Half course (fall term; repeated spring term). Hours to be arranged.*

Graded independent study under faculty supervision. Interested students need approval of head tutor for their topic and must propose a detailed syllabus before the beginning of term.

**Philosophy 97. Tutorial - I**
Catalog Number: 2435
Warren Goldfarb

*Half course (fall term; repeated spring term). Hours to be arranged.*

*Note:* Required of all sophomore concentrators, and for the secondary field in philosophy.

**Philosophy 98hf. Tutorial — Junior Year**
Catalog Number: 5533
Warren Goldfarb

*Half course (throughout the year). Hours to be arranged.*

*Note:* Required of all junior concentrators.

**Philosophy 99. Tutorial — Senior Year**
Catalog Number: 4396
Warren Goldfarb and members of the Department.

*Half course (fall term; repeated spring term). Hours to be arranged.*
Cross-listed Courses

[Culture and Belief 14. Human Being and the Sacred in the History of the West]
[Culture and Belief 31 (formerly Philosophy 19). Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion]

Empirical and Mathematical Reasoning 17 (formerly Quantitative Reasoning 22).

Deductive Logic

[Ethical Reasoning 14 (formerly Moral Reasoning 33). Issues in Ethics]

*Freshman Seminar 31j. Skepticism and Knowledge
*Social Studies 10a. Introduction to Social Studies

For Undergraduates and Graduates

Philosophy 102. Aristotle
Catalog Number: 8100
Russell Edward Jones
Half course (fall term). Tu., Th., at 1; . EXAM GROUP: 15
A survey of some central topics in the work of Aristotle, with attention to his philosophical methodology and his views on nature, substance, change, psychology, and ethics. Readings will include selections from Categories, Analytics, Physics, Metaphysics, De Anima, and Nicomachean Ethics.

Philosophy 117. Medieval Philosophy
Catalog Number: 3897
Jeffrey K. McDonough
Half course (fall term). M., W., (F.), at 11. EXAM GROUP: 4
A study of central topics in the works of Augustine, Aquinas, and Ockham, with primary emphasis on their contributions to metaphysics and epistemology. Likely topics to include: Augustine on skepticism, language, knowledge, and freedom; Aquinas on metaphysics, epistemology, divine nature, human nature, and human cognition; Ockham on logic of terms, mental language, critique of realism, and conceptualism.

Philosophy 120. The Rationalists
Catalog Number: 2512
Jeffrey K. McDonough
Half course (fall term). Hours to be arranged.
A study of some central topics in the works of Descartes, Spinoza, and Leibniz, with primary emphasis on their contributions to metaphysics and epistemology. Note: Expected to be given in 2013–14.

Philosophy 122. British Empiricism
Catalog Number: 9025
Jeffrey K. McDonough
Half course (spring term). M., W., (F.), at 10. EXAM GROUP: 3
A study of the central works of Locke, Berkeley, and Hume, with primary emphasis on their contributions to metaphysics and epistemology.

[Philosophy 129. Kant’s *Critique of Pure Reason*]
Catalog Number: 0614
Matthew Boyle
Half course (spring term). Hours to be arranged.
Kant’s *Critique of Pure Reason* is one of the most important works in the history of philosophy. Our goal is to understand its central doctrines and their significance. Kant’s views on human knowledge; the role of mind in the production of experience; space and time; self-knowledge and its role in experience; causation; freedom of the will; the persistence of the soul after death; the status of metaphysics; and the relationship between appearance and reality.

*Note:* Expected to be given in 2013–14.

[Philosophy 132. Marx and Marxism]
Catalog Number: 6039
Tommie Shelby
Half course (spring term). Tu., Th., at 11; Tu., at 5:30. EXAM GROUP: 13
Introduces the political philosophy and social theory of Karl Marx. Through primary texts we study his theory of history, his account of human self-alienation, his theory of ideology, his attempt to establish that capitalism is exploitative, his critique of liberalism, and his conception of freedom. Discussion also of some contemporary philosophical writings in the Marxist tradition.

[Philosophy 137. The Later Philosophy of Wittgenstein]
Catalog Number: 3360
Richard Moran
Half course (spring term). Tu., Th., at 1. EXAM GROUP: 15
A close reading of Ludwig Wittgenstein’s *Philosophical Investigations*, focusing on its treatments of the topics of meaning, reference, rule-following, cognition, perception, “the private mental realm,” knowledge, scepticism, and the nature of philosophy. Attention to Wittgenstein’s philosophical methodology, with its claim to dissolve philosophical problems rather than propose solutions to them.

[Philosophy 141. Frege, Russell, and the Early Wittgenstein]
Catalog Number: 6807
Warren Goldfarb
Half course (fall term). Hours to be arranged.
An examination of the beginnings of analytic philosophy, with primary interest in the reformulation of traditional philosophical problems by these three authors and the analytic and logical methods they introduced to treat them.

*Note:* Expected to be given in 2013–14.

[Philosophy 144. Logic and Philosophy]
Catalog Number: 1111
Warren Goldfarb

Half course (spring term). Hours to be arranged.

Three philosophically important results of modern logic: Gödel’s incompleteness theorems; Turing’s definition of mechanical computability; Tarski’s theory of truth for formalized languages. Discusses both mathematical content and philosophical significance of these results.

Note: Expected to be given in 2013–14.

Prerequisite: Some knowledge of deductive logic.

Philosophy 147. Philosophy of Language
Catalog Number: 8887
Bernhard Nickel

Half course (spring term). M., W., (F.), at 1; Tu., at 12; Tu., at 2. EXAM GROUP: 6

A survey of central questions in the philosophy of language. Is language primarily a biological or a rational phenomenon? What is meaning? Is language-use governed by specifically linguistic rules, or is it continuous with other rational activity? Can you really translate one language into another? How can we deal with linguistic paradoxes? Readings include Chomsky, Frege, Grice, Quine, Wittgenstein, and Kripke.

*Philosophy 148. Philosophy of Mathematics: Proseminar
Catalog Number: 8341
Warren Goldfarb

Half course (spring term). W., 4–6. EXAM GROUP: 9

Philosophical issues concerning mathematics, such as: its degree of certainty and necessity, its being apparently a priori, what reference to objects such as numbers and sets amounts to, the relation of mathematics and logic, whether classical logic can be called into question. Reading of such writers as Frege, Brouwer, Hilbert, Carnap, Quine, and contemporaries.

Prerequisite: Quantitative Reasoning 22 or the equivalent or some background in mathematics.

Philosophy 151z. Philosophy of Quantum Mechanics
Catalog Number: 5465
Edward J. Hall

Half course (spring term). Tu., Th., 10–11:30; M., at 9; Tu., at 7 p.m.; W., at 10. EXAM GROUP: 12, 13

A crowning achievement of 20th century science, quantum mechanics is also bizarre enough to lead intelligent people to claim that the universe perpetually splits into many copies of itself, that conscious minds can make physical systems "jump" unpredictably, that classical logic must be revised, that there is no objective reality, and much, much more. We will separate the wheat of genuine mystery from the chaff of philosophical confusion. No prior knowledge of quantum mechanics required.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science A.

Philosophy 155. Carnap and Quine
Catalog Number: 26883
Warren Goldfarb

Half course (fall term). M., W., (F.), at 1. EXAM GROUP: 6

An investigation into the revolution that the Logical Positivist movement attempted to effect in
philosophy, and its aftermath. Concentrates on the views of the leading positivist, Rudolf Carnap, on the verifiability theory of meaning, the analysis of empirical knowledge, the refutation of Kant’s theories of geometry and mathematics, and the nature and role of philosophy; and then on to W. V. Quine’s attack on positivism and his development of a post-positivist naturalism.

**Philosophy 156. Philosophy of Mind**  
Catalog Number: 3410  
Cheryl K. Chen  
*Half course (spring term). Tu., Th., at 12; Th., at 4. EXAM GROUP: 14*  
The mind-body problem and proposed solutions to it, including dualism, behaviorism, identity theories, and functionalism. Theories of consciousness, subjective experience, and the mind’s representation of the world.

**Philosophy 158. Self, Body, and Other: Proseminar - (New Course)**  
Catalog Number: 45486  
Matthew Boyle  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*  
An exploration of the distinctive ways in which we know (1) our own minds, (2) our own bodies, (3) the minds of other persons. A central concern will be how each of these kinds of knowledge differs from our knowledge of mere objects. Readings from philosophical sources and from some relevant literature in contemporary psychology and cognitive science.

**Philosophy 159. Epistemology**  
Catalog Number: 5443  
Selim Berker  
*Half course (fall term). Tu., Th., at 12; . EXAM GROUP: 14*  
An introduction to the theory of knowledge. Topics include skepticism about the external world, the analysis of knowledge, sensitivity and safety, the regress of reasons, foundational vs. coherence views, and internalism vs. externalism.

**Philosophy 161. Personal Identity and Self-Consciousness: Proseminar**  
Catalog Number: 7414  
Cheryl K. Chen  
*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*  
An examination of some interconnected issues concerning personal identity and self-consciousness. Topics include the identity of persons over time, introspection, self-reference, and bodily awareness.

**Philosophy 168. Kant’s Ethical Theory**  
Catalog Number: 8361  
Christine M. Korsgaard  
*Half course (spring term). M., W., (F.), at 12; Th., at 12. EXAM GROUP: 5*  
A study of Kant’s moral philosophy, based primarily on the *Groundwork of Metaphysics of Morals*, the *Critique of Practical Reason*, and *The Metaphysics of Morals*. 
Note: This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.

**Philosophy 172. The History of Modern Moral Philosophy**
Catalog Number: 5184
Christine M. Korsgaard
Half course (fall term). M., W., (F.), at 12. EXAM GROUP: 5
A study of the development of modern moral philosophy from its origins in the natural law theories of Hobbes and Pufendorf to the emergence of the two most influential theories of the modern period, utilitarianism and Kantianism, in the works of Bentham and Kant. Selections from the works of Hobbes, Clarke, Butler, Hutcheson, Hume, Smith, Price, and others.
Note: This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement of Moral Reasoning.

[Philosophy 174. Recent Ethical Theory]
Catalog Number: 3266
Christine M. Korsgaard
Half course (fall term). Hours to be arranged.
A study of some major recent philosophical theories of ethics, chosen from among the works of Blackburn, Darwall, Gibbard, Korsgaard, Nagel, Scanlon, Thompson, and others.
Note: Expected to be given in 2013–14. This course, when taken for a letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement of Moral Reasoning.

*Philosophy 176. Topics in Ethics: Proseminar - (New Course)*
Catalog Number: 93512
Douglas Lavin
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
A philosophical consideration of the nature of justice, understood broadly to include those aspects of moral life that involve relations to other persons. Historical and contemporary readings.

**Philosophy 179. Race and Social Justice**
Catalog Number: 6665
Tommie Shelby
Half course (fall term). Tu., Th., at 10; . EXAM GROUP: 12
Critically examines recent philosophical work on questions of racial justice: What is racism? What makes racial discrimination wrong? Are reparations owed for past racial injustices? Is racial profiling ever justified? Under what conditions should we regard racial disparities (e.g., in wealth or employment) as unjust? Should government foster racial integration in schools and neighborhoods? Is affirmative action unfair? Is a just society a "color-blind" society?
Note: This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for letter grade, meets the General Education requirement for Ethical Reasoning or the Core area requirement for Moral Reasoning.
[Philosophy 187. Aesthetics]
Catalog Number: 2594
Richard Moran
Half course (spring term). Hours to be arranged.
An examination of some texts of philosophical aesthetics from the 18th and 19th centuries, texts which either represent or anticipate the Romantic period. Themes include the role of emotion in art, the nature of expression and its relation to the will, problems of sincerity, and art or poetry as sources of knowledge. Readings will include some, but probably not all, of the following authors: Diderot, Schiller, Burke, Kant, Hume, Hegel, Lessing, Rousseau.
Note: Expected to be given in 2013–14.

Cross-listed Courses

Government 1052. History and Freedom in German Idealism
Mathematics 141. Introduction to Mathematical Logic

Primarily for Graduates

*Philosophy 224. Topics in Early Modern Philosophy: Seminar - (New Course)
Catalog Number: 57097
Jeffrey K. McDonough
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8

*Philosophy 248x. Philosophy and Semantics: Seminar - (New Course)
Catalog Number: 60593
Mark Richard
Half course (spring term). Tu., 2–5. EXAM GROUP: 16, 17
Foundational issues raised by contemporary work in semantics for natural languages. Topics: nature of truth and its relation to meaning; vagueness and bivalence; alternatives to truth-conditional semantics; emotional and expressive interpretation of speech and its relation to informational interpretation.

*Philosophy 250z. Metaphysical Grounding: Seminar - (New Course)
Catalog Number: 24178
Selim Berker
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
Recent work on the metaphysical in-virtue-of relation, with applications to debates in the philosophy of religion, metaphysics, epistemology, metaethics, and normative ethics.

*Philosophy 254. Speech and Intersubjectivity: Seminar - (New Course)
Catalog Number: 90807
Richard Moran
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
An examination of speech and intersubjectivity. Topics will include belief and the expression of belief, relational normativity, other minds, communication, and mutual recognition. Readings from contemporary and historical sources.
*Philosophy 277. Philosophy and Law: Seminar - (New Course)
Catalog Number: 94967
Richard H. Fallon (Harvard Law School) and Frances Kamm
Half course (spring term). W., 5–7 p.m. EXAM GROUP: 9
An exploration of some of the ways in which philosophical analysis and discussions of what the law is and ought to be can enrich one another. Readings will include drafts of works-in-progress by philosophers, political theorists, and law professors who will present their work in the seminar.
Note: Offered jointly with Harvard Law School as 2470.

*Philosophy 299hf. Individual Supervision
Catalog Number: 8076
Richard Moran and members of the Department
Half course (throughout the year). Hours to be arranged.
Note: Required of candidates for the AM or PhD in Philosophy. Consult the Department’s Supplement to the General Announcement for details.

Cross-listed Courses

Economics 2082. Social Choice Theory - (New Course)

Graduate Courses of Reading and Research

*Philosophy 300aa (formerly *Philosophy 300a). Colloquium
Catalog Number: 5615
Edward J. Hall 5324 and Sean D. Kelly 5515 (on leave spring term)
Full course (fall term). Hours to be arranged.
An intensive study of selected problems in contemporary philosophy.
Note: Limited to first-year graduate students in the Department.

*Philosophy 300b. Colloquium
Catalog Number: 6280
Selim Berker 5514
Half course (spring term). M., 4–6. EXAM GROUP: 9
Continuation of Philosophy 300aa.

*Philosophy 303. Colloquium: Dissertation Presentations
Catalog Number: 1089
Matthew Boyle 5279
Half course (fall term; repeated spring term). Hours to be arranged.

*Philosophy 305. Individual Reading and Research
Catalog Number: 4462
Selim Berker 5514, Matthew Boyle 5279, Warren Goldfarb 4499, Edward J. Hall 5324, Russell Edward Jones 6777, Frances Kamm 4280, Sean D. Kelly 5515 (on leave spring term), Peter Koellner 4680 (on leave 2012-13), Christine M. Korsgaard 2994, Douglas Lavin 5091, Jeffrey
K. McDonough 5280, Richard Moran 1786, Bernhard Nickel 5516, Mark Richard 6603 (on leave fall term), Thomas M. Scanlon, Jr. 7986 (on leave 2012-13), Amartya Sen 1705, Tommie Shelby 3863, Susanna Siegel 2441 (on leave 2012-13), and Alison Simmons 1300 (on leave 2012-13)

Half course (fall term; repeated spring term). Hours to be arranged.

*Philosophy 310. Research Seminars
Catalog Number: 4465
Selim Berker 5514, Matthew Boyle 5279, Warren Goldfarb 4499, Edward J. Hall 5324, Russell Edward Jones 6777, Frances Kamm 4280, Sean D. Kelly 5515 (on leave spring term), Peter Koellner 4680 (on leave 2012-13), Christine M. Korsgaard 2994, Douglas Lavin 5091, Jeffrey K. McDonough 5280, Richard Moran 1786, Bernhard Nickel 5516, Mark Richard 6603 (on leave fall term), Thomas M. Scanlon, Jr. 7986 (on leave 2012-13), Amartya Sen 1705, Tommie Shelby 3863, Susanna Siegel 2441 (on leave 2012-13), and Alison Simmons 1300 (on leave 2012-13)

Small seminars on specialized topics, arranged by members of the Department in consultation with suitably prepared graduate students. Seminars will be listed individually with numbers from 311 through 398.

*Philosophy 311. Workshop in Moral and Political Philosophy
Catalog Number: 5370
Selim Berker 5514 (fall term only), Christine M. Korsgaard 2994, and Douglas Lavin 5091 (spring term only)

Half course (fall term; repeated spring term). M., 4–6. EXAM GROUP: Fall: 9
A forum for the presentation and discussion of work in progress by students in moral and political philosophy. Open only to graduate students in the Philosophy Department or by invitation of the instructors.

*Philosophy 312. Workshop in Metaphysics and Epistemology
Catalog Number: 0576
Matthew Boyle 5279 (fall term only), Edward J. Hall 5324 (fall term only), Richard Moran 1786 (spring term only), and Mark Richard 6603 (on leave fall term) (spring term only)

Half course (fall term; repeated spring term). M., 4–6. EXAM GROUP: Fall: 9
A forum for the presentation and discussion of work in progress by students in metaphysics and epistemology. Open only to graduate students in the Philosophy Department or by invitation of the instructors.

*Philosophy 315hf. Instructional Styles in Philosophy
Catalog Number: 9781
Bernhard Nickel 5516

Half course (throughout the year). Hours to be arranged.
Course is required for graduate students in their first year of teaching; optional for students in their second year of teaching.

*Philosophy 320. Philosophy in Translation: Latin
Catalog Number: 44862
Jeffrey K. McDonough 5280
Half course (fall term). Hours to be arranged.
A close reading of philosophical texts in their original Latin language with the aim of developing reading and translation skills.

*Philosophy 322. Philosophy in Translation: Greek
Catalog Number: 65437
Russell Edward Jones 6777
Half course (spring term). Hours to be arranged.
Readings from the Greek texts of major figures of classical philosophy.

*Philosophy 333. Preparation for the Topical Examination
Catalog Number: 1967
Selim Berker 5514, Matthew Boyle 5279, Warren Goldfarb 4499, Edward J. Hall 5324, Russell Edward Jones 6777, Frances Kamm 4280, Sean D. Kelly 5515 (on leave spring term), Peter Koellner 4680 (on leave 2012-13), Christine M. Korsgaard 2994, Douglas Lavin 5091, Jeffrey K. McDonough 5280, Richard Moran 1786, Bernhard Nickel 5516, Mark Richard 6603 (on leave fall term), Thomas M. Scanlon, Jr. 7986 (on leave 2012-13), Amartya Sen 1705, Tommie Shelby 3863, Susanna Siegel 2441 (on leave 2012-13), and Alison Simmons 1300 (on leave 2012-13)
Required in both fall and spring terms of all third-year graduate students in the Department.

*Philosophy 399. Direction of Doctoral Dissertations
Catalog Number: 3283
Selim Berker 5514, Matthew Boyle 5279, Warren Goldfarb 4499, Edward J. Hall 5324, Russell Edward Jones 6777, Frances Kamm 4280, Sean D. Kelly 5515 (on leave spring term), Peter Koellner 4680 (on leave 2012-13), Christine M. Korsgaard 2994, Douglas Lavin 5091, Jeffrey K. McDonough 5280, Richard Moran 1786, Bernhard Nickel 5516, Mark Richard 6603 (on leave fall term), Thomas M. Scanlon, Jr. 7986 (on leave 2012-13), Amartya Sen 1705, Tommie Shelby 3863, Susanna Siegel 2441 (on leave 2012-13), and Alison Simmons 1300 (on leave 2012-13)

Physics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Physics

Melissa Franklin, Mallinckrodt Professor of Physics (Chair)
Jacob Barandes, Lecturer on Physics
Howard C. Berg, Herchel Smith Professor of Physics and Professor of Molecular and Cellular
Biology (on leave fall term)
Beatrix Burrola Gabilondo, Preceptor in Physics
Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics
Eugene A. Demler, Professor of Physics
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of Physics
John M. Doyle, Professor of Physics
Gary J. Feldman, Frank B. Baird, Jr. Professor of Science (on leave 2012-13)
Douglas Finkbeiner, Associate Professor of Astronomy
Gerald Gabrielse, George Vasmer Leverett Professor of Physics
Peter L. Galison, Joseph Pellegrino University Professor
Howard Georgi, Mallinckrodt Professor of Physics (Director of Undergraduate Studies)
Roy J. Glauber, Mallinckrodt Professor of Physics, Mallinckrodt Professor of Physics, Emeritus (on leave fall term)
Jene A. Golovchenko, Rumford Professor of Physics and Gordon McKay Professor of Applied Physics (on leave spring term)
Markus Greiner, Professor of Physics
Joao Pedro Guimaraes da Costa, Associate Professor of Physics (on leave 2012-13)
Girma Hailu, Lecturer on Physics
Bertrand I. Halperin, Hollis Professor of Mathematicks and Natural Philosophy
Lene V. Hau, Mallinckrodt Professor of Physics and of Applied Physics (on leave fall term)
Thomas C. Hayes, Lecturer on Physics
Eric J. Heller, Abbott and James Lawrence Professor of Chemistry and Professor of Physics (on leave fall term)
Jennifer E. Hoffman, Associate Professor of Physics
John Huth, Donner Professor of Science
Arthur M. Jaffe, Landon T. Clay Professor of Mathematics and Theoretical Science (on leave spring term)
Efthimios Kaxiras, John Hasbrouck Van Vleck Professor of Pure and Applied Physics, Affiliate of the Department of Chemistry and Chemical Biology
Randall Kelley, Preceptor in Physics
John M. Kovac, Assistant Professor of Astronomy and of Physics
Erel Levine, Assistant Professor of Physics
Mikhail D. Lukin, Professor of Physics (on leave spring term)
Vinothan N. Manoharan, Associate Professor of Chemical Engineering and of Physics, Gordon McKay Professor of Chemical Engineering and Professor of Physics
Charles M. Marcus, Visiting Professor of Physics
Eric Mazur, Balkanski Professor of Physics and Applied Physics, Area Dean for Applied Physics
Logan S. McCarty, Lecturer on Physics, Lecturer on Chemistry and Chemical Biology
Masahiro Morii, Professor of Physics (on leave fall term)
David J. Morin, Lecturer on Physics
Cherry Murray, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences and Professor of Physics, Dean of the School of Engineering and Applied Sciences
Venkatesh Narayanamurti, Benjamin Peirce Professor of Technology and Public Policy (on leave 2012-13)
David R. Nelson, Arthur K. Solomon Professor of Biophysics and Professor of Physics and
Applied Physics *(on leave spring term)*
Sang-Joon Pahk, Preceptor in Physics
Hongkun Park, Professor of Chemistry and Chemical Biology and of Physics
Peter S. Pershan, Frank B. Baird, Jr. Professor of Science *(on leave fall term)*
Mara Prentiss, Mallinckrodt Professor of Physics *(on leave spring term)*
Lisa Randall, Frank B. Baird, Jr. Professor of Science
Matthew Reece, Assistant Professor of Physics
Subir Sachdev, Professor of Physics *(Director of Graduate Studies)*
Aravinthan D. T. Samuel, Professor of Physics
Matthew D. Schwartz, Associate Professor of Physics
Irwin I. Shapiro, Timken University Professor
Isaac F. Silvera, Thomas D. Cabot Professor of the Natural Sciences
Nils Sorensen, Preceptor in Physics
Andrew Strominger, Gwill E. York Professor of Physics *(on leave 2012-13)*
Christopher Stubbs, Professor of Physics and of Astronomy, Harvard College Professor
Cumrun Vafa, Donner Professor of Science
Ronald L. Walsworth, Senior Lecturer on Physics
David A. Weitz, Mallinckrodt Professor of Physics and of Applied Physics
Robert M. Westervelt, Mallinckrodt Professor of Applied Physics and of Physics
Carey Witkov, Preceptor in Physics
Tai T. Wu, Gordon McKay Professor of Applied Physics and Professor of Physics
Amir Yacoby, Professor of Physics and of Applied Physics
Xi Yin, Associate Professor of Physics
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

*Other Faculty Offering Instruction in Physics*

James G. Anderson, Philip S. Weld Professor of Atmospheric Chemistry
Alán Aspuru-Guzik, Associate Professor of Chemistry and Chemical Biology
Federico Capasso, Robert L. Wallace Professor of Applied Physics and Vinton Hayes Senior Research Fellow in Electrical Engineering *(on leave spring term)*
Gerald Holton, Mallinckrodt Professor of Physics and Professor of the History of Science, Emeritus
Paul Horowitz, Professor of Physics and of Electrical Engineering, Emeritus
Gregory C. Tucci, Senior Lecturer on Chemistry and Chemical Biology

There are three separate calculus-based sequences of courses covering introductory physics:
Physical Sciences 1, 2, and 3 and Physics 11a, 11b, or at the intermediate calculus level, Physics 15a, 15b, 15c. Each of the three sequences is designed to be a self-contained treatment of classical physics.

Students who expect to concentrate in physics or one of the other sciences in which physics plays a major role will usually take the Physics 15 sequence followed by Physics 143a, b. Students with excellent high-school preparation may begin the Physics 15 sequence taking Physics 16 instead of Physics 15a. Physics 16 is a course in mechanics and special relativity specifically designed for students who have done well in a high-school advanced placement course.
Physical Sciences 1, 2, and 3 present an introductory treatment of college physics and chemistry in 3 semesters. The courses will be thematically driven, with the themes being related to major societal issues and/or biological systems where appropriate. The Physical Sciences sequence is designed to meet 2 semesters of the physics as well as 1 semester of the chemistry required by all medical schools, and is intended to teach physical concepts in a way that is immediately relevant to students in the life sciences.

Most medical schools also accept the Physics 15 or Physics 11 sequences. Premedical students should inquire at the medical schools to which they expect to apply. Students who do not intend to take advanced courses in the mathematical sciences, and especially those concentrating in biology or biochemistry, may find that the Physical Sciences 1, 2, and 3 sequence covers a broader range of subject matter, and might more appropriately serve their needs than Physics 11a and 11b.

Further details may be found under the individual course headings.

**Primarily for Undergraduates**

**Physical Sciences 1. Chemical Bonding, Energy, and Reactivity: An Introduction to the Physical Sciences**
Catalog Number: 2225
Alán Aspuru-Guzik and Hongkun Park
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3
This course covers the chemistry and physics underlying molecular phenomena in the world around you. Starting from a single electron, we will build up to atoms, molecules, and materials. We will study interactions of molecules through thermochemistry, equilibria, entropy and free energy, acids and bases, electrochemistry, and kinetics. We will apply these concepts to (1) world energy demands and global climate change (2) application of physical principles in biology, and (3) modern materials and technology.
Note: This course is part of an integrated introduction to the physical science intended for students who plan to pursue a concentration in the physical or life sciences and/or satisfy pre-medical requirements in Chemistry. May not be counted toward a degree in addition to the former Chemistry 7. Students interested in Physical Sciences 1 should take the Chemistry Placement Exam. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A. Prerequisite: A few operations of calculus are developed and used. Fluency in pre-calculus secondary school mathematics is assumed. Students are expected to have AP or honors level high school chemistry, or have completed Life and Physical Sciences A (LPS A) with a satisfactory grade.

**Physical Sciences 2. Mechanics, Elasticity, Fluids, and Diffusion**
Catalog Number: 6053
Logan S. McCarty
Half course (fall term). Tu., Th., 9:30-11, and a weekly section and lab to be arranged. EXAM GROUP: 11, 12
An introduction to classical mechanics, with special emphasis on the motion of organisms in fluids. Topics covered include: kinematics, Newton’s laws of motion, oscillations, elasticity, random walks, diffusion, and fluids. Examples and problem set questions will be drawn from the life sciences and medicine.

Note: This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Physical Sciences 1 (or Chemistry 7), Mathematics 1b, or the equivalent.

**Physical Sciences 3. Electromagnetism, Circuits, Waves, Optics, and Imaging**

Catalog Number: 5262

Logan S. McCarty

Half course (spring term). Tu., Th., 9:30-11, and a weekly section and lab to be arranged. EXAM GROUP: 11, 12

This course is an introduction to electromagnetism, digital information, waves, optics and sound. Topics covered include: electric and magnetic fields, electrical potential, circuits, simple digital circuits, wave propagation in various media, microscopy, sound and hearing. The course will draw upon a variety of applications to the biological sciences and will use real-world examples to illustrate many of the physical principles described. There are six laboratories.

Note: This course is part of an integrated introduction to the physical sciences intended for students who plan to pursue a concentration in the life sciences and/or satisfy pre-medical requirements in Physics. May not ordinarily be taken for credit in addition to Physics 1b, 11b, or 15b. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Physical Sciences 2 (or Physics 1a or 11a), Mathematics 1b, or equivalent.

**Physical Sciences 10. Chemistry: A Microscopic Perspective on Molecules, Materials, and Life**

Catalog Number: 75544

Adam E. Cohen and Logan S. McCarty

Half course (fall term). M., W., F., at 10 and a weekly section and lab to be arranged. EXAM GROUP: 3

An introduction to the fundamental theories of quantum mechanics and statistical mechanics and their role in governing the behavior of matter. The course begins with the quantum behavior of a single electron and develops the elements of the periodic table, the nature of the chemical bond, and the bulk properties of materials. Applications include semiconductor electronics, solar energy conversion, medical imaging, and the stability and dynamism of living systems. Calculus will be used extensively.

Note: Physical Sciences 10 and Physical Sciences 11 may be taken in any order. The general chemistry requirement for medical school can be satisfied with any two of the following courses: Life and Physical Sciences A, Life Sciences 1a, Physical Sciences 1, Physical Sciences 10, or Physical Sciences 11. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.

Prerequisite: A strong background in chemistry (Chemistry AP score of 5, or Physical Sciences
Physical Sciences 11. Foundations and Frontiers of Modern Chemistry: A Molecular and Global Perspective
Catalog Number: 24022
James G. Anderson and Gregory C. Tucci
Half course (spring term). M., W., F., at 10 and a weekly section and lab to be arranged.
The Physical Sciences hold the key to solving unprecedented problems at the intersection of science, technology, and an array of rapidly emerging global scale challenges. The course emphasizes a molecular scale understanding of energy and entropy; free energy in equilibria, acid/base reactivity, and electrochemistry; molecular bonding and kinetics; catalysis in organic and inorganic systems; the union of quantum mechanics, nanostructures, and photovoltaics; and the analysis of nuclear energy. Case studies are used both to develop quantitative reasoning and to directly link these principles to global strategies.
Note: Physical Sciences 10 and Physical Sciences 11 may be taken in any order. The general chemistry requirement for medical students can be satisfied with any two of the following courses: Life and Physical Sciences A, Life Sciences 1a, Physical Sciences 1, Physical Sciences 10, or Physical Sciences 11. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.
Prerequisite: A strong background in chemistry. Students are expected to have had Honors or AP-level high school chemistry preparation or a placement score of 650 or better on the Harvard Chemistry Placement exam. A few operations of calculus are developed and used. Fluency in pre-calculus secondary school mathematics is assumed.

Physical Sciences 12a. Mechanics from an Analytic, Numerical and Experimental Perspective - (New Course)
Catalog Number: 43244
Christopher Stubbs
Half course (spring term). Tu., Th., 9:30–11. EXAM GROUP: 11, 12
This is the first term of a two-semester introductory physical science and engineering course sequence. The focus is on quantitative scientific reasoning, with the first term’s exploration framed in the context of basic mechanics. Students will gain competence in both analytic (using pencil, paper and single-variable calculus) and numerical (using computer modeling) approaches to modeling simple physical systems and for the analysis of experimental data. Topics include kinematics, linear and rotational motion, forces, energy, collisions, gravitation, simple fluids and a brief introduction to waves. Examples are drawn from across the physical sciences and engineering. The course is aimed at first year students who have an interest in pursuing a concentration in the sciences and/or engineering. The course structure includes lecture, discussion and laboratory components.
Note: Physical Sciences 12a may not be taken for credit by students who have passed Physics 11a, 15a or 16. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A or Quantitative Reasoning, but not both.
Physics 11a. Mechanics  
Catalog Number: 3131  
Christopher Stubbs  
Half course (fall term). Tu., Th., 11:30-1, and a weekly 90-minute section to be arranged. EXAM GROUP: 13, 14  
This is primarily a course in quantitative scientific reasoning, based on mechanics, that blends the traditional analytic approach with the use of numerical methods. The course is targeted at first year students who have an interest in the physical sciences and/or engineering. Students will gain a proficiency in MATLAB. Topics include kinematics, Newton’s laws of motion, fluids, and waves, with examples drawn from across the physical sciences and engineering. Students planning their physics course sequence for the 2012-2013 academic year should take into account the fact that Physics 11b will not be offered in the Spring 2013 semester. The Physics 11a, 11b sequence will be replaced by a new pair of Physical Science classes, beginning in the Spring 2013 term.  
Note: Physics 11a may not be taken for credit by students who have passed Physics 15a or 16. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A. Students who planned to take Physics 11b Spring Term 2013 should substitute Physical Sciences 3 for Physics 11b.

Physics 11b. Electricity, Magnetism, and Waves  
Catalog Number: 5472  
Efthimios Kaxiras  
Half course (spring term). Tu., Th., 11:30 to 1:00; sections TBA. EXAM GROUP: 13, 14  
Physics 11b is the second half of a one-year physics sequence. It covers the basic phenomena of electricity and magnetism, elements of circuits with selected applications, Maxwell’s equations, electromagnetic waves, and optics.  
Note: Expected to be omitted in 2013–14. May not be taken for credit by students who have passed Physics 15b or Physics 15c. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.  
Prerequisite: Physics 11a; Mathematics 1b. Additionally, some elementary ideas from multivariable calculus will be used and students are encouraged to take Mathematics 19a, 21a or Applied Mathematics 21a concurrently.

Physics 15a. Introductory Mechanics and Relativity  
Catalog Number: 1984  
Gerald Gabrielse and Amir Yacoby (fall term), Howard Georgi and Robert M. Westervelt (spring term)  
Half course (fall term; repeated spring term). Tu., Th., 11:30-1. EXAM GROUP: 13, 14  
Newtonian mechanics and special relativity. Topics include vectors; kinematics in three dimensions; Newton’s laws; force, work, power; conservative forces, potential energy; momentum, collisions; rotational motion, angular momentum, torque; static equilibrium, oscillations, simple harmonic motions; gravitation, planetary motion; fluids; special relativity.
Note: Principles of Scientific Inquiry (PSI) is the laboratory component of Physics 15a. Topics include experimental design, model testing, error analysis, basic programming, oral presentations, and scientific writing. PSI will meet weekly throughout the semester. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Mathematics preparation at least at the level of Mathematics 1b concurrently is required. However, some elementary ideas from multivariable calculus may be used and students are encouraged to take Mathematics 21a concurrently.

Physics 15b, Introductory Electromagnetism
Catalog Number: 2701
David J. Morin and Mara Prentiss (fall term), and David J. Morin and Amir Yacoby (spring term)
Half course (fall term; repeated spring term). Tu., Th., 11:30-1. EXAM GROUP: 13, 14
Electricity and magnetism. Topics include electrostatics, electric currents, magnetic field, electromagnetic induction, Maxwell’s equations, electromagnetic radiation, and electric and magnetic fields in materials.

Note: Principles of Scientific Inquiry (PSI) is the laboratory component of Physics 15b. Topics include experimental design, model testing, error analysis, basic programming, oral presentations, and scientific writing. PSI will meet weekly throughout the semester. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when taken for a letter grade, meets the Core area requirement for Science A.

Prerequisite: Physics 15a, Physics 16, or written permission of the Head Tutor in Physics. Mathematics preparation at least at the level of Mathematics 21a taken concurrently is required. Vector calculus, (div, grad and curl) are used extensively--in principle, this is taught in the course. Students taking Mathematics 21a concurrently will likely find that some concepts are introduced in Physics 15b before they have seen them in Mathematics 21a. Some students may wish to postpone Physics 15b until they have completed Mathematics 21a.

Physics 15c, Wave Phenomena
Catalog Number: 8676
John M. Doyle and Markus Greiner (fall term), Matthew D. Schwartz and Vinothan N. Manoharan (spring term)
Half course (fall term; repeated spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Forced oscillation and resonance; coupled oscillators and normal modes; Fourier series; Electromagnetic waves, radiation, longitudinal oscillations, sound; traveling waves; signals, wave packets and group velocity; two- and three-dimensional waves; polarization; geometrical and physical optics; interference and diffraction. Optional topics: Water waves, holography, x-ray crystallography, and solitons.

Note: Principles of Scientific Inquiry (PSI) is the laboratory component of Physics 15c. Topics include experimental design, model testing, error analysis, basic programming, oral presentations, and scientific writing. PSI will meet weekly throughout the semester. This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both. This course, when
taken for a letter grade, meets the Core area requirement for Science A.  
**Prerequisite:** Physics 15a, Physics 15b, or written permission of the Head Tutor in Physics.  
Mathematics preparation at least at the level of Mathematics 21b taken concurrently is required.  
Some prior knowledge of complex numbers (for example as taught in Mathematics 1b) is helpful.  
Linear algebra and differential equations are used extensively.  
Students taking Mathematics 21b concurrently will likely find that some concepts are introduced in Physics 15c before they have seen them in Mathematics 21b.  
Some students may wish to postpone Physics 15c until they have completed Mathematics 21b.

**Physics 16. Mechanics and Special Relativity**  
Catalog Number: 2019  
Howard Georgi and Xi Yin  
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14  
Newtonian mechanics and special relativity for students with good preparation in physics and mathematics at the level of the advanced placement curriculum.  
Topics include oscillators damped and driven and resonance (how to rock your car out of a snow bank or use a swing), an introduction to Lagrangian mechanics and optimization, symmetries and Noether’s theorem, special relativity, collisions and scattering, rotational motion, angular momentum, torque, the moment of inertia tensor (dynamic balance), gravitation, planetary motion, and a quantitative introduction to some of the mind-bending ideas of modern cosmology like inflation and dark energy.  
**Note:** Principles of Scientific Inquiry (PSI) is the laboratory component of Physics 16.  
Topics include experimental design, model testing, error analysis, basic programming, oral presentations, and scientific writing.  
PSI will meet weekly throughout the semester.  
Emphasis is placed on collaborative teaching and learning.  
Many class materials are Mathematics notebooks.  
This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or Empirical and Mathematical Reasoning, but not both.  
This course, when taken for a letter grade, meets the Core area requirement for Science A.  
**Prerequisite:** Score of 5 on the mechanics section of the Physics C Advanced Placement exam, or equivalent.  
Mathematics preparation at least at the level of Mathematics 21a taken concurrently is required.  
Thorough knowledge of calculus of one variable and vectors plus some mathematical sophistication.  
The mathematical level will be significantly higher than that of Physics 15a.

*Physics 90r. Supervised Research*  
Catalog Number: 2460  
David J. Morin and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged.  
Primarily for selected concentrators in Physics, or in Chemistry and Physics, who have obtained honor grades in Physics 15 and a number of intermediate-level courses.  
The student must be accepted by some member of the faculty doing research in the student’s field of interest.  
The form of the research depends on the student’s interest and experience, the nature of the particular field of physics, and facilities and support available.  
Students wishing to write a senior thesis can do so by arranging for a sponsor and enrolling in this course.  
**Note:** A list of possible faculty sponsors and their fields is available in Lyman 238 and on the Physics Department Web page.  
Course enrollment forms may be obtained from Lyman 238.
*Physics 91r. Supervised Reading Course for Undergraduates*
Catalog Number: 1218
David J. Morin and members of the Department
*Half course (fall term; repeated spring term). Hours to be arranged.*
Open to selected concentrators in Physics, Chemistry and Physics, and other fields who wish to
do supervised reading and studying of special topics in physics. Ordinarily such topics do not
include those covered in a regular course of the Department. Honor grades in Physics 15 and a
number of intermediate-level courses are ordinarily required. The student must be accepted by a
member of the faculty.
*Note:* A list of possible faculty sponsors and their fields is available in Lyman 238 and on the
Physics Department’s website. Course enrollment forms may be obtained from Lyman 238.

*Physics 95. Topics in Current Research*
Catalog Number: 2806 Enrollment: Limited to 10.
Melissa Franklin
*Half course (fall term). Section i: M., 2:45-4:15; Section ii: W., 7:30-9 p.m.*
The goal of this tutorial is twofold. First, students will learn about a range of modern physics
research topics from experts at Harvard as well as from one another. Every Wednesday evening a
faculty member speaks on his/her area of research, preceded by assigned reading and a student
presentation designed to introduce the basic physics, as well as important developments and
burning problems at the frontiers of that particular research area. Second, the tutorial provides
structured activities to help students develop practical skills for their future careers, expanding
knowledge on unfamiliar subjects, participating in discussions, presenting and writing clearly
about complex topics, and engaging in self and peer evaluation.
*Note:* Primarily for junior and senior concentrators. First class meeting M 2:30-4. Monday class
time to be rescheduled to fit everyone’s schedule.

**Cross-listed Courses**

Earth and Planetary Sciences 52. Introduction to Global Geophysics - *(New Course)*
Hear: The Science of Music and Sound
[Science of the Physical Universe 20. What is Life? From Quarks to Consciousness]
Science of the Physical Universe 22. The Unity of Science: From the Big Bang to the
Brontosaurus and Beyond

**For Undergraduates and Graduates**

Certain physics courses are offered in several other departments. See especially the offerings of
the Division of Engineering and Applied Sciences.

Physics 123. Laboratory Electronics
Catalog Number: 0864 Enrollment: Limited to 22 students.
Thomas C. Hayes  
*Half course (fall term; repeated spring term). Tu., Th., 1:30–5:30. EXAM GROUP: 15, 16, 17, 18*

A lab-intensive introduction to electronic circuit design. Develops circuit intuition and debugging skills through daily hands-on lab exercises, each preceded by class discussion, with minimal use of mathematics and physics. Moves quickly from passive circuits, to discrete transistors, then concentrates on operational amplifiers, used to make a variety of circuits including integrators, oscillators, regulators, and filters. The digital half of the course treats analog-digital interfacing, emphasizes the use of microcontrollers and programmable logic devices (PLDs).

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.

**Physics 125. Widely Applied Physics**  
*Ronald L. Walsworth*

*Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

 Applies elementary physics to the real world and fundamental phenomena, introducing estimation and calculational techniques that are commonly used by research physicists when addressing new problems. Emphasis is on developing physical intuition and the ability to do order-of-magnitude calculations. New physical concepts are introduced as necessary. Example topics: the Big Bang and searches for Earth-like exoplanets; material properties and phase transitions; masers, lasers, and the global positioning system; magnetic resonance imaging and physiology of major organs; Earth properties & human energy use. Example estimation techniques: dimensional analysis, commonly used concepts such as diffusion and the Bloch model, scaling laws, and symmetries and conservation laws.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of the Physical Universe or the Core area requirement for Science A.  
**Prerequisite:** Physics 15a,b,c, and mathematics at the level of Mathematics 21a. Physics 143a and 181 are very helpful, and may be taken concurrently.

**Physics 129. Energy Science**  
*Lene V. Hau*

*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

Non-fossil energy sources and energy storage are important for our future. We cover four main subjects to which students with a background in physics and physical chemistry could make paradigm changing contributions: photovoltaic cells, nuclear power, batteries, and photosynthesis. Fundamentals of electrodynamics, statistical/thermal physics, and quantum mechanics are taught as needed to give students an understanding of the topics covered.

**Prerequisite:** Physics 15a (or 16), 15b,c or 11a,b. Pre/co-requisite Physics 143a or Chemistry 160 or equivalent.

[**Physics 136. Physics of Medical Imaging**]  
*Andrew J. M. Kiruluta (Medical School)*
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
This course presents the underlying physics of modern medical diagnostic imaging techniques. We will explore the physics of diagnostic imaging from a unified electromagnetics’ viewpoint ranging from a simple mapping of radiation attenuation coefficients in X-ray, to resonance absorption in a nuclear magnetic resonance (NMR) induced inhomogeneously broadened RF absorber. The bulk of the course will focus on the powerful technique of NMR imaging. Flexibility exists to vary the depth of each area depending on background and experience of the students.
Prerequisite: Physics 15b or 11b and mathematics preparation at least to the level of Mathematics 21b taken concurrently. Physics 143a and b are recommended but not essential.

[Physics 140. Physical Biology and Biological Physics]
Catalog Number: 5394
Aravinthan D. T. Samuel
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
We will discuss how theoretical and experimental tools derived from physics--in particular, statistical mechanics, fluid mechanics, optics and imaging--have been used to gain insight into molecular and cellular biology. We will also discuss a few cases where the study of biological materials (e.g. polymers and membranes) has inspired new developments in physics. In all cases, the relevant topics in physics and biology will be taught from first principles.
Note: Expected to be omitted in 2012–13. Expected to be given in 2013–14. Given in alternate years. Lectures, problem sets, discussions. May not be taken for credit by students who have taken MCB 140.
Prerequisite: Physics 15a.b.

Physics 141. The Physics of Sensory Systems in Biology
Catalog Number: 1284 Enrollment: Limited to 15.
Aravinthan D. T. Samuel
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Living organisms use sensory systems to inform themselves of the sights, sounds, and smells of their surrounding environments. Sensory systems are physical measuring devices, and are therefore subject to certain limits imposed by physics. Here we will consider the physics of sensory measurement and perception, and study ways that biological systems have solved their underlying physical problems. We will discuss specific cases in vision, olfaction, and hearing from a physicist’s point of view.
Prerequisite: Physics 11a,b or 15 a,b, required.

Physics 143a. Quantum Mechanics I
Catalog Number: 1050
Eugene A. Demler (fall term) and John M. Doyle (spring term)
Half course (fall term; repeated spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Introduction to nonrelativistic quantum mechanics: uncertainty relations; Schrödinger equation; Dirac notation; matrix mechanics; one-dimensional problems including particle in box, tunneling, and harmonic oscillator; angular momentum, hydrogen atom, spin, Pauli principle; time-independent perturbation theory; scattering.
Prerequisite: Linear algebra including matrix diagonalization; Physics 15c or written permission of the Head Tutor.

**Physics 143b. Quantum Mechanics II**  
Catalog Number: 0253  
Subir Sachdev  
*Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13*  
*Prerequisite: Physics 143a.*

**Physics 145. Elementary Particle Physics**  
Catalog Number: 6057  
John Huth  
*Half course (spring term). Lecture meets M.,W., 9:30-11; seminars and sections Tu., Th., 7:30-9 pm, as needed. EXAM GROUP: 2, 3*  
Introduction to elementary particle physics. Emphasis is on concepts and phenomenology rather than on a detailed calculational development of theories. Starts with the discovery of the electron in 1897, ends with the theoretical motivation for the Higg’s boson, and attempts to cover everything important in between. Taught partly in seminar mode, with each student presenting a classic paper of the field.  
*Prerequisite: Physics 143a. Physics 143b or equivalent is useful.*

**Physics 151. Mechanics**  
Catalog Number: 2068  
Arthur M. Jaffe  
*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
Fundamental ideas of classical mechanics including contact with modern work and applications. Topics include Lagrange’s equations, the role of variational principles, symmetry and conservation laws, Hamilton’s equations, Hamilton-Jacobi theory and phase space dynamics. Applications to celestial mechanics, quantum mechanics, the theory of small oscillations and classical fields, and nonlinear oscillations, including chaotic systems presented.  
*Prerequisite: Physics 15a, 15b or written permission of the Head Tutor; Mathematics 21a, b or equivalent.*

**Physics 153. Electrodynamics**  
Catalog Number: 0264  
Girma Hailu  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
Aimed at advanced undergraduates. Emphasis on the properties and sources of the electromagnetic fields and on the wave aspects of the fields. Course starts with electrostatics and
subsequently develops the Maxwell equations. Topics: electrostatics, dielectrics, magnetostatics, electrodynamics, radiation, wave propagation in various media, wave optics, diffraction and interference. A number of applications of electrodynamics and optics in modern physics are discussed. 

Prerequisite: Physics 15a, b, and c, or written permission of the Head Tutor; Mathematics 21a, b or equivalent.

[Physics 165. Modern Atomic, Molecular, and Optical Physics]  
Catalog Number: 16952  
John M. Doyle  
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
Includes the use of coherent electromagnetic radiation to probe and control atomic systems, use of traps to isolate atoms, molecules, and elementary particles for studies of ultracold quantum degenerate matter and precision tests of the standard model; resonance methods. Goals of course include acquainting student with these and other modern research topics while providing the foundations of modern atomic, molecular and optical physics research.  
Prerequisite: Physics 143a and 143b.

Physics 175. Laser Physics and Modern Optical Physics  
Catalog Number: 9076  
Markus Greiner  
Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
Prerequisite: Physics 15b, 15c, 143a, or permission of the instructor.

Physics 181. Statistical Mechanics and Thermodynamics  
Catalog Number: 6346  
Erel Levine  
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4  
Introduction to thermal physics: basic concepts of thermodynamics (energy, heat, work, temperature, and entropy), ensembles and partition functions. Applications include theory of solids (Debye and Einstein) and magnetism; black body radiation (Planck); classical and quantum gases and liquids; phase transitions (VDW, Ising); biological molecules and signals.  
Note: May not be taken for credit in addition to Engineering Sciences 181.  
Prerequisite: Physics 143a or equivalent.

*Physics 191r. Advanced Laboratory  
Catalog Number: 7711 Enrollment: Together with Physics 247r, limited to a total of 24 students.  
Isaac F. Silvera and Robert M. Westervelt (fall term), and Peter S. Pershan and Isaac F. Silvera (spring term)  
Half course (fall term; repeated spring term). Tu., Th., 1–5. EXAM GROUP: 15, 16, 17, 18
Students carry out three experimental projects selected from those available representing condensed matter, atomic, nuclear, and particle physics. Included are pulsed nuclear magnetic resonance, microwave spectroscopy, optical pumping, Raman scattering, scattering of laser light, nitrogen vacancies in diamond, neutron activation of radioactive isotopes, Compton scattering, relativistic mass of the electron, recoil free gamma-ray resonance, lifetime of the muon, studies of superfluid helium, positron annihilation, superconductivity, the quantum Hall effect, properties of semiconductors. The facilities of the laboratory include several computer controlled experiments as well as computers for analysis.

*Note:* A substantial amount of outside reading is expected.

*Prerequisite:* Physics 15a or 16, 15b, 15c. Physics 143a is highly recommended.

**Physics 195. Introduction to Solid State Physics**
Catalog Number: 2978
_Federico Capasso_

*Half course (fall term). W., F., 1-2:30. EXAM GROUP: 6, 7*


*Note:* Designed as a first course in solid state physics for students with knowledge of elementary quantum mechanics, for example, Physics 143a. Some knowledge of statistical physics is also helpful, but not a formal prerequisite. Students who propose to take Applied Physics 295a in the spring term, and who have not previously taken a formal course in solid state physics, are strongly advised to take this course first.

**Cross-listed Courses**

_Applied Mathematics 147. Nonlinear Dynamical Systems_
_Astronomy 150. Radiative Processes in Astrophysics_
_Astronomy 191. Astrophysics Laboratory_
_Chemistry 160. Quantum Chemistry_
_Chemistry 161. Statistical Thermodynamics_
_Chemistry 163. Frontiers in Biophysics_
*Chemistry 165. Experimental Physical Chemistry_
[Earth and Planetary Sciences 131. Introduction to Physical Oceanography and Climate]*
[Earth and Planetary Sciences 161 (Global Tectonics). Planetary Physics and Global Tectonics]*
_Engineering Sciences 120. Introduction to the Mechanics of Solids_
_Engineering Sciences 123. Introduction to Fluid Mechanics and Transport Processes_
_Engineering Sciences 154. Electronic Devices and Circuits_
_Engineering Sciences 173. Introduction to Electronic and Photonic Devices_
_Engineering Sciences 181. Engineering Thermodynamics_
_Engineering Sciences 190. Introduction to Materials Science and Engineering_
_MCB 131. Computational Neuroscience_
Primarily for Graduates

The courses primarily for graduates are open to undergraduates provided they have passed the prerequisites with a grade of C or higher; in each case, special permission by the instructor is needed. In cases where students do not have the listed prerequisites, the written approval of the Head Tutor is required.

Physics 210. General Theory of Relativity
Catalog Number: 4840
Jacob Barandes
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An introduction to general relativity: the principle of equivalence, Riemannian geometry, Einstein’s field equation, the Schwarzschild solution, the Newtonian limit, experimental tests, black holes.
Prerequisite: Physics 151 and 153, and Mathematics 21 or equivalents.

[Physics 211r (formerly Physics 211). Black Holes from A to Z]
Catalog Number: 0469
Andrew Strominger
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
A survey of black holes focusing on the deep puzzles they present concerning the relations between general relativity, quantum mechanics and thermodynamics. Topics include: causal structure, event horizons and Penrose diagrams, experimental tests, the laws of black hole thermodynamics, Hawking radiation, the information puzzle, the Bekenstein-Hawking entropy/area law, microstate counting, holography and condensed matter applications. Parallel issues arising in cosmologies with event horizons will also be covered.
Prerequisite: General relativity at level of Physics 210 or equivalent. Physics 253a helpful, but not required.

[*Physics 215. Biological Dynamics]
Catalog Number: 90876 Enrollment: Open to undergraduates with instructor permission.
Erel Levine
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Develops theoretical basis for modeling and quantitative analysis of biological problems. Emphasis on contemporary research topics, including molecular, cellular and tissue dynamics; development and differentiation; signal- and mechano-transduction; individuals, populations and environments.
Note: Expected to be omitted in 2012–13. Expected to be given in 2013–14. It is suggested that students may wish to take AP215 when this course is bracketed. May not be taken for credit in addition to AP215.
Prerequisite: Knowledge of differential equations and statistical mechanics at undergraduate level.

[Physics 216. Mathematics of Modern Physics]
Catalog Number: 85954
Arthur M. Jaffe  
**Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14**  
*Prerequisite:* Familiarity with quantum theory at an undergraduate level.

**Physics 223. Electronics for Scientists - (New Course)**  
Catalog Number: 97765 Enrollment: Limited to 22.  
Thomas C. Hayes  
**Half course (fall term; repeated spring term). Tu., Th., 1:30–5:30. EXAM GROUP: 15, 16, 17, 18**  
An introduction to electronic circuit design intended to develop circuit intuition and debugging skills through daily design exercises, discussion and hands-on lab exercises. The approach is intensely practical, minimizing theory. Moves quickly from passive circuits to discrete transistors, then concentrates on operational amplifiers, used to make a variety of circuits including integrators, oscillators, regulators, and filters. The digital half of the course treats analog-digital interfacing, emphasizes the use of microcontrollers and programmable logic devices (PLDs).

**Physics 232 (formerly Physics 232a). Advanced Classical Electromagnetism**  
Catalog Number: 4885  
Jacob Barandes  
**Half course (spring term). W., F., 2:30–4. EXAM GROUP: 7, 8**  
Special relativity, relativistic field theories, gauge invariance, the Maxwell equations in free space, conservation laws, time-independent phenomena, electrodynamics and radiation theory, radiation from rapidly-moving accelerating charges, scattering and diffraction, and macroscopic averaged fields and propagation in matter. Additional topics may include superconductors, accelerator physics, renormalization, and magnetic monopoles.  
*Prerequisite:* Physics 153 and Physics 143a, or equivalent.

*Physics 247r. Laboratory Course in Contemporary Physics*  
Catalog Number: 8665 Enrollment: Together with Physics 191r, limited to a total of 24 students.  
Isaac F. Silvera and Robert M. Westerfelt (fall term), Peter S. Pershan and Isaac F. Silvera (spring term)  
**Half course (fall term; repeated spring term). Tu., Th., 1–5. EXAM GROUP: 15, 16, 17, 18**  
Three experimental projects are selected representing condensed matter, atomic, nuclear, and particle physics. Examples: experiments on pulsed nuclear magnetic resonance, microwave spectroscopy, optical tweezers, and non-linear optics, optical pumping, Raman scattering, scattering of laser light, nitrogen vacancies in diamond, neutron activation of radioactive isotopes, Compton scattering, relativistic mass of the electron, recoil free gamma-ray resonance, lifetime of the muon, studies of superfluid helium, positron annihilation, superconductivity, the quantum Hall effect, properties of semiconductors. The facilities of the laboratory include...
several computer controlled experiments as well as computers for analysis. 
*Note: A substantial amount of outside reading may be required.*

**Physics 251a. Advanced Quantum Mechanics I**
Catalog Number: 2191
*Bertrand I. Halperin*
_Half course (fall term). M., W., F., at 12. EXAM GROUP: 5_
Basic course in nonrelativistic quantum mechanics. Review of wave functions and the Schrödinger Equation; Hilbert space; the WKB approximation; central forces and angular momentum; scattering; electron spin; measurement theory; the density matrix; time-independent perturbation theory.  
*Prerequisite:* Physics 143a, b or equivalent, or permission of instructor.

**Physics 251b. Advanced Quantum Mechanics II**
Catalog Number: 2689
*Bertrand I. Halperin*
_Half course (spring term). M., W., F., at 12. EXAM GROUP: 5_
Heisenberg picture; time-dependent perturbations; inelastic scattering; degenerate harmonic oscillators; electrons in a uniform magnetic field; quantized radiation field; absorption and emission of radiation; identical particles and second quantization; symmetry principles; Feynman Path integrals.  
*Prerequisite:* Physics 251a.

**Physics 253a. Quantum Field Theory I**
Catalog Number: 8050
*Matthew D. Schwartz*
_Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16_
Introduction to relativistic quantum field theory. This course covers quantum electrodynamics. Topics include canonical quantization, Feynman diagrams, spinors, gauge invariance, path integrals, ultraviolet and infrared divergences, renormalization and applications to the quantum theory of the weak and gravitational forces.  
*Prerequisite:* Physics 143a,b or equivalents.

**Physics 253b. Quantum Field Theory II**
Catalog Number: 5250
*Xi Yin*
_Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16_
*Prerequisite:* Physics 253a.

**Physics 253c. Quantum Field Theory III**
Catalog Number: 4000
*Lisa Randall*
_Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14_
This course explores advanced topics in quantum field theory. Possible topics include semi-classical methods, tunneling in flat and curved spaces, topological defects, lattice gauge theories, conformal field theories in diverse dimensions, large $N$ and string description of gauge theory, the AdS/CFT correspondence, and supersymmetric gauge theories in four dimensions.  

**Prerequisite:** Physics 253b.

**Physics 254. The Standard Model - (New Course)**  
Catalog Number: 29114  
**Matthew Reece**  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
The Standard Model of particle physics: theory and experimental implications. Topics include nonabelian gauge theory, spontaneous symmetry breaking, anomalies, the chiral Lagrangian, QCD and jets, collider physics and simulation, the Higgs at the LHC.  
**Prerequisite:** Introductory relativistic field theory, at the level of Physics 253a.

**Physics 262. Statistical Physics**  
Catalog Number: 1157  
**Erel Levine**  
*Half course (fall term). M., W., F., at 11. EXAM GROUP: 4*  
Basic principles of statistical physics and thermodynamics, with applications including: the equilibrium properties of classical and quantum gases, phase transitions and critical phenomena, as illustrated by the liquid-gas transition and simple magnetic models. Universality, scaling and renormalization group. Introduction to non-equilibrium physics.  
**Note:** Students may wish to take Applied Physics 284 when this course is bracketed.  
**Prerequisite:** Physics 143a and Physics 181 or Engineering Sciences 181.

**[Physics 268r. Special Topics in Condensed Matter Physics. Quantum Many-Body Systems]**  
Catalog Number: 7951  
**Eugene A. Demler**  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
Field theory methods and Green’s function approach to quantum many-body systems. Subjects discussed will include interacting electron and phonon systems, magnetism and superconductivity, systems with disorder, low dimensional systems, systems of ultracold atoms, nonequilibrium phenomena.  
**Note:** Expected to be omitted in 2012–13. Expected to be given in 2013–14.  
**Prerequisite:** Applied Physics 295a or equivalent.

**[Physics 269r. Topics in Statistical Physics and Physical Biology]**  
Catalog Number: 6214  
**David R. Nelson**  
*Half course (spring term). M., W., F., at 11. EXAM GROUP: 4*  
Introduction to strongly interacting soft condensed matter and biophysical systems. We begin with the physics of cells and related single molecule experiments on bio-polymers such as DNA, RNA and proteins. A major part of the course will then focus on genetic engineering, and the non-equilibrium statistical dynamics of genetic circuits and neural networks.
Note: Expected to be given in 2013–14.
Prerequisite: Physics 262, Applied Physics 284 or equivalent.

[Physics 270. Mesoscopic Physics and Quantum Information Processing]
Catalog Number: 0788
Charles M. Marcus
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Introduces the subject of quantum effects in electronic systems, including conductance fluctuations, localization, electron interference, and many-body effects such as the Kondo effect. This year, we will also focus on solid state implementations of quantum information processing systems.
Note: Expected to be omitted in 2012–13. Expected to be given in 2013–14. The reading list focuses primarily on the experimental literature, augmented by recent texts and reviews. The format of the course is a combination of lectures and journal-club-style presentations. A term paper on a topic within mesoscopic condensed matter physics or quantum information will allow for deeper exploration. Given in alternate years.
Prerequisite: Basic familiarity with quantum mechanics and solid state physics at the level of undergraduate courses.

Physics 271 (formerly Physics 287). Topics in the Physics of Quantum Information
Catalog Number: 7647
Mikhail D. Lukin
Half course (fall term). M., W., 12–1:30. EXAM GROUP: 5, 6
Introduction to physics of quantum information, with emphasis on ideas and experiments ranging from quantum optics to condensed matter physics. Background and theoretical tools will be introduced. The format is a combination of lectures and class presentations.
Prerequisite: Quantum mechanics at the level of introductory graduate courses.

[Physics 283b. Beyond the Standard Model]
Catalog Number: 7153
Instructor to be determined
Half course (fall term). Hours to be arranged.
Covers current advances in particle physics beyond the Standard Model. Topics could include supersymmetry, the physics of extra dimensions, experimental searches, including for T violation, and connections between particle physics and cosmology.

[Physics 284. Strongly Correlated Systems in Atomic and Condensed Matter Physics]
Catalog Number: 4673
Eugene A. Demler
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Explores an emerging interface involving strongly correlated systems in atomic and condensed matter physics. Topics include bosonic and fermionic Hubbard models, strongly interacting systems near Feshbach resonances, magnetism of ultracold atoms, quantum spin systems, low dimensional systems, non-equilibrium coherent dynamics.

Prerequisite: Graduate quantum mechanics or permission of instructor.

**Physics 285a. Modern Atomic and Optical Physics I**
Catalog Number: 8204
Gerald Gabrielse

*Half course (spring term). M., W., 10:30–12. EXAM GROUP: 3, 4*

Introduction to modern atomic physics. The fundamental concepts and modern experimental techniques will be introduced. Topics will include two-state systems, magnetic resonance, interaction of radiation with atoms, transition probabilities, spontaneous and stimulated emission, dressed atoms, trapping, laser cooling of “two-level” atoms, structure of simple atoms, fundamental symmetries, two-photon excitation, light scattering and selected experiments. The first of a two-term subject sequence that provides the foundations for contemporary research.

*Prerequisite:* One course in quantum mechanics (143a and b, or equivalent).

**[Physics 285b. Modern Atomic and Optical Physics II]**
Catalog Number: 4195
Mikhail D. Lukin

*Half course (fall term). M., W., 12-1:30. EXAM GROUP: 5, 6*

Introduction to quantum optics and modern atomic physics. The basic concepts and theoretical tools will be introduced. Topics will include coherence phenomena, non-classical states of light and matter, atom cooling and trapping and atom optics. The second of a two-term subject sequence that provides the foundations for contemporary research.


*Prerequisite:* A course in electromagnetic theory (Physics 232a or equivalent); one half-course in intermediate or advanced quantum mechanics.

**Physics 287a. Introduction to String Theory**
Catalog Number: 2012
Cumrun Vafa

*Half course (fall term). W., F., 3–4:30. EXAM GROUP: 8, 9*

Introduction to the perturbative formulation of string theories and dualities. Quantization of bosonic and superstrings, perturbative aspects of scattering amplitudes, supergravity, D-branes, T-duality and mirror symmetry. Also a brief overview of recent developments in string theory.

*Prerequisite:* Physics 253a, b or equivalent.

**Physics 287br. Topics in String Theory**
Catalog Number: 4555
Cumrun Vafa

*Half course (spring term). W., F., 1–2:30. EXAM GROUP: 6, 7*

A selection of topics from current areas of research on string theory.

*Prerequisite:* Physics 287a.

**[Physics 289r. Euclidean Random Fields, Relativistic Quantum Fields and Positive Temperature]**
Catalog Number: 6400
Arthur M. Jaffe  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
The course will give the reconstruction of relativistic quantum fields from Euclidean fields as well as the relation between representations of the Poincaré group to those of Euclidean group. Related topics are reflection positivity and Osterwalder-Schrader quantization, and supersymmetry, some of which will be covered.  
*Prerequisite:* Physics 253a

**Physics 295a. Introduction to Quantum Theory of Solids**  
Catalog Number: 10292  
Eugene A. Demler  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
Properties of solids, electrical, optical, thermal, magnetic, mechanical, are treated based on an atomic scale picture and using the single electron approximation. Metals, semiconductors, and insulators are covered, including special topics such as superconductivity.  
*Prerequisite:* Applied Physics 195 or equivalent, and one full quantum mechanics graduate level course similar to Physics 251a. Physics 251b may be taken concurrently.

**Physics 295b. Quantum Theory of Solids**  
Catalog Number: 98229  
Subir Sachdev  
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17  
Theory of the electron liquid, Fermi liquid theory. Ferromagnetism of metals, BCS theory of superconductivity. Lattice models of correlated electrons: antiferromagnetism, spin liquids, and emergent gauge fields. Feynman diagram and functional methods will be developed during the course.  
*Prerequisite:* Physics 251a,b, an introductory course in solid state physics, or permission of instructor.

**Cross-listed Courses**

**Applied Mathematics 201. Physical Mathematics I**  
**Applied Mathematics 202. Physical Mathematics II**  
**Applied Mathematics 205. Advanced Scientific Computing: Numerical Methods**  
**Applied Physics 216. Modern Optics and Quantum Electronics**  
**[Applied Physics 217. Applications of Modern Optics]**  
**[Applied Physics 284. Statistical Thermodynamics]**  
**[Applied Physics 295a. Introduction to Quantum Theory of Solids]**  
**[Applied Physics 295b. Quantum Theory of Solids]**  
**Applied Physics 298r. Interdisciplinary Chemistry, Engineering and Physics: Seminar**  
**[Engineering Sciences 274. Quantum Technology I]**  
**[Engineering Sciences 275. Nanophotonics]**  
**MCB 212. Topics in Biophysics**
Graduate Courses of Reading and Research

Courses of preliminary reading or experimental research are designated by “a.” Thesis research are designated by “b” and these courses are to be used only when an instructor has agreed to supervise a student’s research for the PhD. Reading and Research courses largely concerned with physics are offered under the sponsorship of several other departments, particularly Astronomy, Chemistry, and Earth and Planetary Sciences; and of the Division of Engineering and Applied Sciences (Applied Mathematics, Applied Physics, Computer Science, and Engineering Sciences).

*Physics 301a,301b. Experimental Atomic and Elementary Particle Physics
Catalog Number: 1735,1736
Gerald Gabrielse 1768

*Physics 302. Teaching and Communicating Physics
Catalog Number: 51609 Enrollment: Limited to 36. Priority will be given to first-year graduate students.
Jacob Barandes 3363
Half course (spring term). W., or Th., 4-6.
Hands-on, experienced-based course for graduate students on teaching and communicating physics, conducted through practice, observation, feedback, and discussion. Departmental rules for teaching fellows, section and laboratory teaching, office hours, assignments, grading, and difficult classroom situations.

*Physics 303a,303b. Sensory and Behavioral Neuroscience
Catalog Number: 1727,1792
Aravinthan D. T. Samuel 4625

*Physics 305a,305b. Experimental High Energy Physics
Catalog Number: 7929,0855
John Huth 3506

*Physics 307a,307b. Atomic/Bio-physics, Quantum Optics
Catalog Number: 7534,3277
Lene V. Hau 2151 (on leave fall term)

*Physics 309a,309b. Topics in Elementary Particle Theory
Catalog Number: 4556,4561
Cumrun Vafa 2069

*Physics 311a,311b. Experimental Atomic, Molecular, and Low-Energy Particle Physics
Catalog Number: 6839,6838
John M. Doyle 3507
*Physics 313a,313b. Experimental Condensed Matter Physics  
Catalog Number: 7154,6363  
Amir Yacoby 5596

*Physics 315a,315b. Topics in Theoretical Atomic, Molecular, and Condensed Matter Physics  
Catalog Number: 7387,8871  
Eric J. Heller 1074 (on leave fall term)

*Physics 317a,317b. Topics in Biophysics  
Catalog Number: 8345,0990  
Xiaowei Zhuang 3991

*Physics 319a,319b. Topics in Experimental High Energy Physics  
Catalog Number: 4520,4521  
Melissa Franklin 2500

*Physics 321a,321b. Experimental Soft Condensed Matter Physics  
Catalog Number: 9963,7098  
David A. Weitz 2497

*Physics 327a,327b. Topics in Condensed Matter Physics  
Catalog Number: 5969,6524  
David R. Nelson 5066 (on leave spring term)

*Physics 329a,329b. Condensed Matter and Statistical Theory  
Catalog Number: 6198,6373  
Bertrand I. Halperin 4755

*Physics 331a,331b. Topics in String Theory  
Catalog Number: 1624,9280  
Xi Yin 6162

*Physics 333a,333b. Experimental Atomic Physics  
Catalog Number: 2902,2904  
Mara Prentiss 2741 (on leave spring term)

*Physics 335a,335b. Topics in the History and Philosophy of Physics  
Catalog Number: 6697,4276  
Gerald Holton 1883

*Physics 337a,337b. Topics in Experimental High Energy Physics  
Catalog Number: 1809,6368  
Masahiro Morii 3798 (on leave fall term)
*Physics 339a,339b. Condensed Matter and Atomic Physics
Catalog Number: 5096,6843
Subir Sachdev 5252

*Physics 341a,341b. Topics in Experimental Atomic and Condensed Matter Physics
Catalog Number: 1990,6602
Markus Greiner 5344

*Physics 343a,343b. Observational Cosmology and Experimental Gravitation
Catalog Number: 4253,6881
Christopher Stubbs 4856

*Physics 345a,345b. Experimental Gravitation: Radio and Radar Astronomy
Catalog Number: 5067,5072
Irwin I. Shapiro 7660

*Physics 347a,347b. Topics in Quantum Optics
Catalog Number: 8010,1627
Mikhail D. Lukin 3990 (on leave spring term)

*Physics 349a,349b. Topics in Theoretical Particle Physics
Catalog Number: 4124,9866
Matthew D. Schwartz 6194

*Physics 351a,351b. Experimental Soft Condensed Matter and Materials Physics
Catalog Number: 6533,5661
Vinothan N. Manoharan 5251

*Physics 353a,353b. Topics in Statistical Physics and Quantitative Molecular Biology
Catalog Number: 66502,81609
Erel Levine 6304

*Physics 355a,355b. Theory of Elementary Particles
Catalog Number: 1213,7654
Roy J. Glauber 2113 (on leave fall term)

*Physics 357a,357b. Experimental Condensed Matter Physics
Catalog Number: 4430,5227
Robert M. Westervelt 6148

*Physics 359a,359b. Topics in Condensed Matter Physics
Catalog Number: 8238,7560
Eugene A. Demler 3847
*Physics 361a,361b. Topics in Experimental High Energy Physics  
Catalog Number: 21181,51395  
Joao Pedro Guimaraes da Costa 5698 (on leave 2012-13)

*Physics 363a,363b. Topics in Condensed Matter Theory  
Catalog Number: 2957,2958  
Efthimios Kaxiras 3050

*Physics 365a,365b. Topics in Mathematical Physics  
Catalog Number: 5170,1567  
Arthur M. Jaffe 2095 (on leave spring term)

*Physics 367a,367b. Experimental Astrophysics  
Catalog Number: 1075,1274  
Paul Horowitz 3537

*Physics 369a,369b. Experimental Condensed Matter: Synchrotron Radiation Studies  
Catalog Number: 1538,1539  
Peter S. Pershan 1105 (on leave fall term)

*Physics 371a,371b. Topics in Experimental High Energy Physics  
Catalog Number: 2519,6461  
Gary J. Feldman 2599 (on leave 2012-13)

*Physics 373a,373b. Historical and Philosophical Approaches to Modern and Contemporary Physics  
Catalog Number: 6140,6143  
Peter L. Galison 3239

*Physics 377a,377b. Theoretical High Energy Physics  
Catalog Number: 1436,2007  
Tai T. Wu 1051

*Physics 379a,379b. Topics in Elementary Particle Research and String Theory  
Catalog Number: 7523,7524  
Andrew Strominger 3700 (on leave 2012-13)

*Physics 381a,381b. Experimental Condensed Matter Physics  
Catalog Number: 1281,2355  
Jennifer E. Hoffman 4888

*Physics 383a,383b. Low Temperature Physics of Quantum Fluids and Solids; Ultra High Pressure Physics  
Catalog Number: 3851,4395  
Isaac F. Silvera 7468
*Physics 385a,385b. Topics in Biophysics
Catalog Number: 5901,5902
Howard C. Berg 1377 (on leave fall term)

*Physics 387a,387b. Applied Photonics
Catalog Number: 5772,5774
Eric Mazur 7952

*Physics 389a,389b. Topics in Field Theory: The Standard Model and Beyond
Catalog Number: 4393,2571
Lisa Randall 4255

*Physics 391a,391b. Experimental Atomic Physics, Biophysics, and Soft Matter Physics
Catalog Number: 1006,2753
Ronald L. Walsworth 2263

*Physics 393a,393b. Topics in Elementary Particle Theory
Catalog Number: 6051,6218
Howard Georgi 4754

*Physics 395a,395b. Topics in Theoretical High Energy/String Theory - (New Course)
Catalog Number: 11641,56022
Matthew Reece 7173

*Physics 397a,397b. Experimental Condensed Matter Physics
Catalog Number: 7355,7356
Jene A. Golovchenko 1986 (on leave spring term)

Political Economy and Government

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in Political Economy and Government

Kenneth A. Shepsle, George D. Markham Professor of Government (Chair)
Christopher N. Avery, Roy E. Larsen Professor of Public Policy and Management at the John F.
Kennedy School of Government (Kennedy School)
Daniel P. Carpenter, Allie S. Freed Professor of Government
Suzanne J. Cooper, Edith M. Stokey Senior Lecturer in Public Policy (Kennedy School)
Jeffry Frieden, Stanfield Professor of International Peace
Edward L. Glaeser, Fred and Eleanor Glimp Professor of Economics
Michael J. Hiscox, Clarence Dillon Professor of International Affairs
William W. Hogan, Raymond Plank Professor of Global Energy Policy (Kennedy School)
Daniel Andres Hojman, Associate Professor of Public Policy (Kennedy School)
Sendhil Mullainathan, Professor of Economics
Joseph P. Newhouse, John D. MacArthur Professor of Health Policy and Management (Kennedy School, Medical School, Public Health)
J. Mark Ramseyer, Professor of Japanese Legal Studies (Law School)
Dani Rodrik, Rafiq Hariri Professor of International Political Economy at the John F Kennedy School Government (Kennedy School)
Beth A. Simmons, Clarence Dillon Professor of International Affairs
Robert N. Stavins, Albert Pratt Professor of Business and Government at the John F Kennedy School of Government (Kennedy School)
Dustin Tingley, Assistant Professor of Government
Richard J. Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy in the John F Kennedy School of Government (Kennedy School)

The Doctoral Program in Political Economy and Government (PEG) is intended for scholars interested in academic or policy making careers requiring advanced knowledge of both Economics and Political Science. It is appropriate for students whose academic interests are not fully served by doctoral studies in Economics or Political Science alone. In Political Economy and Government, candidates have intellectual interests in the impact of politics on economic processes and outcomes, and the reciprocal influence of economic conditions on political life. This interest is often applied to such diverse areas as international political economy, political development, political and economic institutions, institutional transition and reform, environmental resource policies, and social policy.

Candidates for the PEG degree are typically in residence for two years before undertaking the oral examination. Satisfactory completion of the oral examination is a prerequisite for writing a dissertation. Continuation of candidacy is contingent upon suitable progress and achievement during each academic year.

Applicants to this program must present their academic credentials, career plans, and a tentative outline of their proposed program research. All applicants must specify whether they are applying to the Economics track or the Political Science track. For a full description of the track requirements, visit the PEG website at www.hks.harvard.edu. Recent scores from the aptitude portion of the Graduate Record Examination (GRE) are required, as are transcripts for all prior study and three letters of recommendation. Application forms and leaflets describing field and other requirements are available at the Graduate School of Arts and Sciences. For further information on faculty, programs, and courses in the John F. Kennedy School of Government, see the school’s catalog and courses of instruction.

For more information about the doctoral program, visit the program website at www.hks.harvard.edu/degrees/phd/peg.
Psychology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Psychology

Ken Nakayama, Edgar Pierce Professor of Psychology (Chair)
Brandon R. Abbs, Lecturer on Psychology
George Angelo Alvarez, John L. Loeb Associate Professor of the Social Sciences
Elinor Amit, College Fellow in Psychology
Nicholas Peter Aramovich, College Fellow in Psychology
Mahzarin R. Banaji, Richard Clarke Cabot Professor of Social Ethics
Joshua William Buckholtz, Assistant Professor of Psychology
Randy L. Buckner, Professor of Psychology and of Neuroscience
Alfonso Caramazza, Daniel and Amy Starch Professor of Psychology
Susan E. Carey, Henry A. Morss, Jr. and Elisabeth W. Morss Professor of Psychology (on leave 2012-13)
Joanna A. Christodoulou, Lecturer on Psychology
Delphine Sophie Courvoisier, Lecturer on Psychology
Daniel T. Gilbert, Edgar Pierce Professor of Psychology
Joshua D. Greene, John and Ruth Hazel Associate Professor of the Social Sciences
Güven Güzeldere, Senior Lecturer on Philosophy and Psychology
J. Richard Hackman, Edgar Pierce Professor of Social and Organizational Psychology
Christine Hooker, Associate Professor of Psychology (on leave 2012-13)
Jill M. Hooley, Professor of Psychology
Ellen J. Langer, Professor of Psychology
Justin J. Lehmiller, College Fellow in Psychology
Christine Ma-Kellams, College Fellow in Psychology
Richard J. McNally, Professor of Psychology
Jason P. Mitchell, Professor of Psychology (on leave 2012-13)
Mariko Moher, College Fellow in Psychology
Matthew K. Nock, Professor of Psychology (on leave 2012-13)
Nicole E. Noll, College Fellow in Psychology
Steven Pinker, Johnstone Family Professor of Psychology, Harvard College Professor
Ian Reed, College Fellow in Psychology
Daniel L. Schacter, William R. Kenan, Jr. Professor of Psychology (Director of Undergraduate Studies) (on leave spring term)
James Sidanius, Professor of Psychology and of African and African American Studies
Jesse Snedeker, Professor of Psychology (Director of Graduate Studies)
Leah Somerville, Assistant Professor of Psychology  
Elizabeth S. Spelke, Marshall L. Berkman Professor of Psychology  
Felix Warneken, Assistant Professor of Psychology  
Daniel M. Wegner, John Lindsley Professor of Psychology in Memory of William James (on leave spring term)  
John R. Weisz, Professor of Psychology  
Yaoda Xu, Assistant Professor of Psychology

Other Faculty Offering Instruction in the Department of Psychology

Kurt W. Fischer, Charles Bigelow Professor of Education (Education School)  
Francesca Gino, Associate Professor (Business School)  
Scott E. Lukas, Professor of Psychiatry (Medical School)  
Holly A. Parker, Lecturer on Psychology  
Diego Pizzagalli, Associate Professor of Psychiatry (Medical School)  
Gabrielle Rappolt Schlichtmann, Adjunct Lecturer on Education (Education School)  
William Simpson, Lecturer (Business School)

For a list of other courses which automatically count for undergraduate concentration credit, please see the note under the cross-listed courses for Undergraduates and Graduates.

Primarily for Undergraduates: Introductory Course

Science of Living Systems 20. Psychological Science

Primarily for Undergraduates: Foundational Courses

MCB 80. Neurobiology of Behavior  
Psychology 13. Cognitive Psychology

Catalog Number: 8706  Enrollment: This course meets foundational requirements and should be taken before courses at the 1000 level or higher.

Jesse Snedeker  
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7  
An introduction to the study of human cognition. Topics include perception, attention, memory, categorization, language, and consciousness. We will consider how human thought processes are organized, how they affect our everyday behavior, and the biological mechanisms that underlie them.

Note: This course, when taken for a letter grade, meets the Core area requirement for Science B. This course meets the Psychology foundational requirement.

Prerequisite: Science of Living Systems 20 or its predecessors, or permission of instructor.

Psychology 14 (formerly Psychology 1301). Cognitive Neuroscience  
Catalog Number: 5607  
Daniel L. Schacter and George Angelo Alvarez
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
How do our brains give rise to our minds? Specifically, how are mental processes related to
neural activity? This course will explore these questions, as well as the methods by which
cognitive neuroscience seeks to answer them. We will focus on processes within perception,
attention, memory, language, action, emotion, and social cognition, and methods including
neuroimaging, neuropsychology, and electrophysiology.
Note: This course meets foundational requirements and should be taken before courses at the
1000 level or higher.
Prerequisite: Science of Living Systems 20 or its predecessors.

Psychology 15. Social Psychology
Catalog Number: 4760
Joshua D. Greene
Half course (spring term). M., W. 1-2:30, and a one-hour section to be arranged. EXAM
GROUP: 6, 7
An introduction to social psychological research and theory regarding everyday behavior. Topics
include: social influence, attitude change, and obedience to authority; stereotyping and prejudice;
social cognition; social interaction and group processes; interpersonal attraction; prosocial
behavior; and everyday human judgment.
Note: This course, when taken for a letter grade, meets the General Education requirement for
Science of Living Systems or the Core area requirement for Science B. This course meets
foundational requirements and should be taken before courses at the 1000 level or higher.
Prerequisite: Science of Living Systems 20 or its predecessors.

Psychology 18. Abnormal Psychology
Catalog Number: 8560
Joshua William Buckholtz
Half course (fall term). Tu., Th., 11:30-1, and a weekly section to be arranged. EXAM GROUP:
13, 14
Introduction to the study of psychopathology. Focuses on theoretical models of abnormal
behavior as they relate to the definition, etiology, and treatment of mental disorders. Diagnostic
classification, behavioral, and biological features of the major syndromes of psychopathology
emphasized.
Note: This course, when taken for a letter grade, meets the Core area requirement for Science B.
This course meets foundational requirements and should be taken before courses at the 1000
level or higher.
Prerequisite: Science of Living Systems 20 or its predecessors.

Primarily for Undergraduates

*Psychology 910r. Supervised Research
Catalog Number: 1472
Mahzarin R. Banaji and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Independent empirical research (laboratory or field) conducted under the supervision of a
departmental faculty member. Research report or equivalent paper required. May be taken up to
three times for College credit; limits on research courses for concentration credit apply.

*Note:* An Application is required for admission; due to the Psychology Undergraduate Office the day before Study Cards are due.

**Psychology 950. Psychology Live**
Catalog Number: 5195 Enrollment: Limited to 25.
_Elinor Amit_
Faculty will each lecture about their main area of research: its history, methods, and discoveries, focusing on contemporary research topics including perception, memory, cognitive development, animal cognition, social cognition, moral decision-making, consciousness, language, and psychopathology. Includes a view of methods to study the mind, brain and behavior involving neuroscientific techniques, evolutionary psychology, web-based experimentation, traditional laboratory experiments, and field studies. Emphasis is primarily human, as well as nonhuman primates. _Prerequisite:_ Science of Living System 20, Psychology 1, or Science B-62.

**Psychology 971. Contemporary Issues in Psychology: Intensive Cross-level Analyses**
Catalog Number: 3498
_Mahzarin R. Banaji and members of the Department_
Half course (fall term; repeated spring term). Hours to be arranged.
Examines selected issues and phenomena in contemporary psychological research. Special attention to examining topics from a variety of perspectives, to reading primary sources in the field, and to developing thinking, writing, research, and discussion skills. This tutorial, or Psychology 975, is required of concentrators upon entering the concentration, normally in the sophomore year. Letter graded. _Note:_ This course is taught entirely in sections, so a required first meeting of this course will be held the first day of classes; see Registrar’s first meeting list for time and location. Students may take this course before formally declaring Psychology as their concentration. _Prerequisite:_ Science of Living Systems 20 (or equivalent) or concurrent enrollment.

Catalog Number: 9063
_Mahzarin R. Banaji and members of the Department_
Half course (fall term; repeated spring term). Hours to be arranged.
Examines selected issues of relevance to social and cognitive neuroscience addressed in contemporary psychological research, and is normally required for students in the Social and Cognitive Neuroscience track of Psychology. Special attention to examining topics from a variety of perspectives, to reading primary sources in the field, and to developing thinking, writing, research, and discussion skills. This tutorial, or Psychology 971, is required of concentrators upon entering the concentration, normally in the sophomore year. Letter-graded. _Note:_ This course is taught entirely in sections, so a required first meeting of this course will be held the first day of classes; see Registrar’s first meeting list for time and location. Students may take this course before formally declaring Psychology as their concentration. _Prerequisite:_ Science of Living Systems 20 (or equivalent) or concurrent enrollment.
**Psychology 980f. Animal Cognition**  
Catalog Number: 89069 Enrollment: Limited to 16.  
*Mahzarin R. Banaji and members of the Department*  
*Half course (fall term). Tu., 3–5.*  
This course is an introduction to the study of animal cognition and thought processes. Topics include categorization, memory, number concepts, insight, and language-like behavior. The course requires reading and critiquing original journal articles.  
*Note:* Not open to students who have taken PSY 1351.  
*Prerequisite:* Science of Living Systems 20 or its predecessors, and one foundational course.

**Psychology 980g. Developmental Neuroscience**  
Catalog Number: 50838 Enrollment: Limited to 25.  
*Half course (fall term). Tu., Th., 1–2:30.*  
Theories and findings in the psychology and neuropsychology of infancy, childhood and adolescence, with reference to lifespan development. Topics addressed include language, executive function, moral reasoning and memory. Studies of abnormal development, including dyslexia and ADHD, will illuminate the nature of brain development across dispersed neural networks. Implications of modern understanding of neurocognitive development on policy and education will be considered.  
*Note:* Expected to be given in 2013–14. Typically meant for Junior and Senior Psychology concentrators.  
*Prerequisite:* Science of Living Systems 20 or its predecessors, and one foundational course.

**Psychology 980j. Psychology of Religion**  
Catalog Number: 48338 Enrollment: Limited to 16.  
*Mahzarin R. Banaji and members of the Department.*  
*Half course (fall term). Tu., 6–8 p.m.*  
This seminar will explore scientific theory and research on the psychology of religious beliefs and practices, integrating cognitive, developmental, evolutionary, neuroscientific and social levels of analysis. Topics addressed include dualism, afterlives, agency perception & anthropomorphism, creationism & teleofunctional reasoning, magic & taboos, ritualistic behavior & prayer, cooperation, and debates concerning religion as adaptation vs. by-product.  
*Note:* Typically meant for Junior and Senior Psychology concentrators.  
*Prerequisite:* Science of Living Systems 20 or its predecessors, and one foundational course.

**Psychology 980k. Growing Up and Growing Old: Cognitive Changes in Childhood and Aging**  
Catalog Number: 76843 Enrollment: Limited to 16.  
*Mahzarin R. Banaji and members of the Department*  
*Half course (fall term). Th., 6–8 p.m.*  
This seminar will focus on the profound cognitive changes of early childhood and old age. We will be especially interested in what such changes tell us about how the adult mind -- perched between childhood and old age -- is organized. Topics include: theories of development and theories of aging, changes in the neural substrate; the rise and fall of executive functions;
conceptual gain and conceptual loss; expertise and wisdom; healthy aging and dementias.  
Prerequisite: Science of Living Systems 20 or its predecessors, and one foundational course.

*Psychology 980l. Language and Thought  
Catalog Number: 37547 Enrollment: Limited to 16.  
Mahzarin R. Banaji and members of the Department  
Half course (fall term). Tu., 1–3.  
Can we think without language? Do the particular language(s) we know shape our thoughts?  
This course will explore language and thought through case studies in various populations and  
domains (e.g., color, space, number) and consider whether language is a merely a communicative  
tool, or whether it influences how we think.  
Prerequisite: Science of Living Systems 20 or its predecessors and one foundational course.

*Psychology 980n. Nonverbal Communication  
Catalog Number: 25145 Enrollment: Limited to 16.  
Mahzarin R. Banaji and members of the Department  
Half course (spring term). Tu., 1–3.  
Prerequisite: Science of Living Systems 20 or its predecessors, and one foundational course

*Psychology 980o. Perception and Imagination  
Catalog Number: 97975 Enrollment: Limited to 16.  
Mahzarin Banaji and members of the Department  
Perception is required to have a mind like yours. How does perceiving work? How are streams of  
sensory input processed into rich and useful models of the world around you? This course will  
converge on the 5 senses from many informative angles, explaining how perception tracks and  
shapes reality, then gives rise to imagination.  
Prerequisite: Science of Living Systems 20 or its predecessors and one foundational course.

*Psychology 985. Junior Tutorial: Honors Thesis Preparation  
Catalog Number: 2343  
Mahzarin R. Banaji and members of the Department  
Half course (fall term; repeated spring term). Fall: Hours to be arranged; Spring: W., at 5.  
Supervised reading and research with a faculty supervisor normally resulting in a thesis  
prospectus. Required, supplemental group meetings to discuss topic and supervisor selection,  
study methodology, prospectus writing, and the prospectus meeting. Graded SAT/UNS. Full  
prospectus or term paper required.  
Note: Normally limited to junior psychology concentrators. Admission to course by way of  
application.  
Prerequisite: Psychology 1901 or concurrent enrollment.

Senior Tutorial

*Psychology 990. Senior Tutorial: Honors Thesis in Psychology  
Catalog Number: 3553  
Mahzarin R. Banaji and members of the Department
Full course. Hours to be arranged.
Individual supervised thesis research supplemented with occasional group meetings to discuss major aspects of the thesis process (e.g., organizing, conducting, and presenting research). Graded Sat/Unsat. Prospectus meeting required for fall term credit, as well as a paper for students who divide course at mid-year. Submission of thesis required for full year credit.

Note: Required of and limited to senior psychology concentrators in the general psychology Honors-eligible thesis track.

Prerequisite: Approved thesis application and Psychology 1901.

*Psychology 992. Senior Tutorial: Honors Thesis (Mind/Brain/Behavior)
Catalog Number: 4990
Mahzarin R. Banaji and members of the Department
Full course. Hours to be arranged.
Individual supervised thesis research supplemented with occasional group meetings to discuss major aspects of the thesis process (e.g., organizing, conducting, and presenting research). Graded Sat/Unsat. Prospectus meeting required for fall term credit, as well as a paper for students who divide course at mid-year. Submission of thesis required for full year credit.

Note: Required of and limited to senior psychology concentrators in the Cognitive Science thesis track, who will take this course in lieu of Psychology 990. Prerequisite: Approved thesis application and Psychology 1901.

Prerequisite: Approved thesis application and Psychology 1901.

*Psychology 993. Senior Tutorial: Honors Thesis (Social and Cognitive Neuroscience)
Catalog Number: 5567
Mahzarin R. Banaji and members of the Department.
Full course. Hours to be arranged.
Individual supervised research supplemented with occasional group meetings to discuss major aspects of the thesis process (e.g., organizing, conducting, and presenting research). Graded Sat/Unsat. Prospectus meeting required for fall term credit, as well as a paper for students who divide course at mid-year. Submission of thesis required for full year credit.

Note: Required of and limited to senior honors psychology concentrators in the Social and Cognitive Neuroscience track, who will take this course in lieu of Psychology 990.

Prerequisite: Approved thesis application and Psychology 1901.

Cross-listed Courses

*Mind, Brain, and Behavior 91z. Music, Mind, and Brain
[*Mind, Brain, and Behavior 92. A Systems Neuroscience Approach to Conscious Perceptual Experience]
*Mind, Brain, and Behavior 93. Conscious States: Waking, Sleeping, and Dreaming
*Mind, Brain, and Behavior 94z. The Self: What Philosophy, Psychology, and Neuroscience Tell Us
*Mind, Brain, and Behavior 95. Addiction, Choice, and Motivation
[*Mind, Brain, and Behavior 96. The Science of Happiness]
Mind, Brain, and Behavior 97a. Avian Cognition: Why Being Called a Bird Brain Is a Compliment
**Mind, Brain, and Behavior 99z. Creativity Research: Madmen, Geniuses, and Harvard Students**

For Undergraduates and Graduates

**Psychology 1005. Health Psychology**  
Catalog Number: 62039  
Ellen J. Langer  
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13  
This course will examine psychological and physical health and the relationship between them. Research from mindfulness theory, mind/body studies, and positive psychology will be discussed along with research on stress, medical decision-making, behavioral medicine and social psychological theories that are pertinent to health.  
*Prerequisite:* SLS-20 or equivalent and any foundational course.

[Psychology 1006. Psychology of Morality]  
Catalog Number: 98864  
Instructor to be determined  
Half course (fall term). Hours to be arranged.  
This class will survey the recent history and evolution of research in moral psychology, emphasizing the function of moral thought in the regulation of intra-psychic processes and the shaping of social judgment and interaction. Students will be expected to engage in interactive discussion as well as participate in experimental research.  
*Note:* Expected to be given in 2014–15.  
*Prerequisite:* Science of Living Systems 20 or its predecessors and Psychology 13 or Psychology 15.

[*Psychology 1051. MATLAB: Introduction to Programming for Behavioral Research*]  
Catalog Number: 25165 Enrollment: Limited to 10.  
George Angelo Alvarez  
Half course (spring term). Tu., 1:30–4. EXAM GROUP: 15, 16, 17  
This course will introduce students to the basics of the MATLAB user interface and programming language, for the purpose of using MATLAB to conduct behavioral research. In the first half of the course, you will learn about MATLAB syntax, general programming concepts such as functions, loops, and conditional statements, and how to analyze and visualize data in MATLAB. In the second half of the course, you will learn to program psychology experiments with the Psychophysics toolbox (a set of MATLAB functions), including displaying stimuli (visual and auditory), and collecting responses from participants.  
*Note:* Expected to be given in 2015–16. All students are required to bring a laptop computer to class. Open to graduate and undergraduate students with permission of instructor.

[*Psychology 1052. The application of fMRI in cognitive neuroscience research*]  
Catalog Number: 91794 Enrollment: Limited to 18.  
Yaoda Xu  
Half course (fall term). M., 10–12. EXAM GROUP: 3, 4  
Functional magnetic resonance imaging (fMRI) is one of the most widely used methods in
cognitive neuroscience research. In this course, students will learn the basics of fMRI research and gain hands-on experience in conducting fMRI experiments. In the first part of the course, students will have an overview of the fMRI methods, including how fMRI works, basic designs of fMRI experiments, fMRI data collection, analysis and interpretation, and current applications of fMRI in cognitive neuroscience research. In the second part of the course, students will design and conduct fMRI experiments and analyze fMRI data.

*Note:* Open to graduate students and advanced undergraduates with permission of instructor. 

*Prerequisite:* Science of Living Systems 20 or its predecessors and one foundational course.

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**Psychology 1053. Sex, Evolution, and Human Behavior - (New Course)**

Catalog Number: 41863 Enrollment: Limited to 25.

*Ian Reed*

*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*

Evolutionary Psychology can be conceptualized as the study of: 1) the conditions in ancestral populations that rendered certain behaviors adaptive and others non-adaptive, 2) the mechanisms natural selection shaped to produce the adaptive behaviors, and 3) the ways in which these evolved mechanisms function now. Evolutionary Psychology provides a new and often insightful perspective to all areas of psychology, with particular success so far in cognitive psychology, social psychology, personality psychology, developmental psychology, and the psychology of emotions, to name a few areas. This course will cover how Evolutionary Psychology sheds light on the phenomena traditionally studied in these areas. 

*Prerequisite:* Science of Living Systems 20 or its predecessors, and any foundational course.

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**Psychology 1201. Your Brain on Drugs: Psychopharmacology**

Catalog Number: 6717

*Scott E. Lukas (Medical School)*

*Half course (fall term). M., W., 1-2:30, and a one-hour section to be arranged. EXAM GROUP: 6, 7*

An introduction to how drugs affect mood, sensation, consciousness, and other psychological and behavioral functions in both healthy and disease states. Introduces concepts in neuroscience and pharmacology to understand how drugs are used to treat drug abuse, psychiatric disorders and why individuals use recreational drugs. Covers all CNS drugs, including antidepressants, antipsychotics, alcohol, and both licit and illicit drugs of abuse. Debates controversial topics such as research with psychiatric populations, diagnosing ADHD, teenage suicide, marijuana legalization, and needle exchange programs.

*Note:* This course, when taken for a letter grade, meets the Core area requirement for Science B. 

*Prerequisite:* Science of Living Systems 20 or its predecessors and either Psychology 13, Psychology 14, Psychology 18, or MCB 80.

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**Psychology 1303. The Human Brain Then and Now - (New Course)**

Catalog Number: 72663 Enrollment: Limited to 20.

*Randy L. Buckner*

*Half course (spring term). M., 4–6.*

This course will explore the "mismatch" between our ancestral brain and the modern world. After covering the evolution of the human brain, the bulk of the course will focus on case studies including how drugs hijack the normal function of brain systems, how the Facebook age places
stresses on social systems that evolved to handle close-knit groups of 25 or so individuals, and how the brain degenerates as we live unexpectedly long.

Prerequisite: Science of Living Systems 20 or its prerequisites or MCB 80.

**Psychology 1304. Brain Damage as a Window into the Mind: Cognitive Neuropsychology**
Catalog Number: 2419
Alfonso Caramazza
Half course (spring term). M., 1–3:30. EXAM GROUP: 6, 7, 8
Examines the patterns of perceptual, motor, cognitive, and linguistic impairments resulting from brain damage. The focus is on the implications of the various types of neuropsychological deficits (such as visual neglect, dyslexia, and aphasia) for theories of the mind and the functional organization of the brain.

Prerequisite: Science of Living Systems 20 or its predecessors and Psychology 13, Psychology 14, or MCB 80.

**[Psychology 1307. Brain Genomics]**
Catalog Number: 63133
Randy L. Buckner
Half course (spring term). Hours to be arranged.
Genetics provides a powerful approach for exploring human behavioral variation and learning how dysfunction in neural circuits influences cognition. This course will cover the basics of genetic inheritance and genomic sequencing to understand brain function. Topics include autistic disorders, schizophrenia, and normal cognitive variation. The goals of the class will be (1) to debate the potential of bridging genomics and human neuroscience, and (2) to survey recent successes in brain genomics.

Note: Expected to be given in 2013–14.
Prerequisite: Life Science 1A; MCB 80 or Science of Living Systems 20 desirable.

**Psychology 1352. Foundations of Cognitive Neuroscience Research**
Catalog Number: 9399 Enrollment: Limited to 12.
Randy L. Buckner
Half course (fall term). F., 10–11:30 and a weekly section to be determined. EXAM GROUP: 3, 4
Intended for undergraduates or those with limited background in cognitive neuroscience. Students will attend and participate in laboratory research and in a seminar that includes discussion of active scientific projects, recent important journal articles, and didactic lecture on technical aspects of methods central to cognitive neuroscience research. Readings will be assigned that survey basic principles of system neuroscience, cognitive science, and methods including functional MRI, MEG, and single unit physiology.

Note: Limited to students involved in research.
Prerequisite: Science of Living Systems 20 or its predecessors or MCB 80, or permission of instructor. For graduate students, permission of instructor.

**[Psychology 1354. Classic Papers on Memory (and the Ones that Got Away!)]**
Catalog Number: 5684
Randy L. Buckner
Half course (spring term). Hours to be arranged.
Classic articles in memory will be discussed in the context of why they are seminal to the field. Topics will include amnesia, LTP, levels of processing, implicit memory, brain imaging, and prospection. Within each topic, articles that are less seminal, but reported earlier, will also be discussed. A goal will be to debate what specifically allowed the classic articles to change the way we think. What sets them apart? 
**Note:** Expected to be given in 2013–14.

**Prerequisite:** For undergraduates: Science of Living Systems 20 or its predecessors or MCB 80 required, or permission of instructor. For graduate students, permission of instructor.

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*Psychology 1357. Puzzles of the Mind: Humans, Animals, Robots: Seminar*
Catalog Number: 87888 Enrollment: Limited to 25.
**Güven Güzeldere**
Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18
An interdisciplinary comparative study of human, animal, and robot minds. Particular emphasis on philosophical questions that frame the problems, and recent work in psychology, cognitive science, and neuroscience that attempt to tackle them empirically. Relation between consciousness and cognition, language and thought, conscious versus unconscious information processing. Manifestations of mental capacities in different underlying substrates: the human brain, nervous systems of non-human animals, and silicon-based computational systems. Additional readings from cognitive ethology and artificial intelligence.
**Prerequisite:** Science of Living Systems 20 or its predecessors and one from Psychology 13, 14, 15, 16, or 18, or MCB 80, or Science of Living Systems 15, or coursework in philosophy.

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*Psychology 1358. Is there more to thought than muscle twitches? Cognitive and neural aspects of object and action knowledge*
Catalog Number: 83581 Enrollment: Limited to 15.
**Alfonso Caramazza**
Half course (fall term). M., 1–3. EXAM GROUP: 6, 7
Knowledge of objects and actions encompasses their perceptual and motor properties as well as more abstract properties such as information about their function (e.g., what they are used for, the goal of an action). In this seminar, we will explore the relationship between the sensory-motor processes involved in the perception of objects and the execution of actions and the organization and representation of the conceptual knowledge associated with objects and actions. We will review critically the relevant behavioral, neuroimaging and neuropsychological research.
**Prerequisite:** Science of Living Systems 20 or its predecessors plus Psychology 13 or Psychology 14 or MCB 80, or permission of instructor.

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[Psychology 1430. Human Memory and Amnesia]
Catalog Number: 8922
**Daniel L. Schacter**
Half course (spring term). Hours to be arranged.
Surveys current data and theory concerning human memory and amnesia from cognitive, neuroimaging, and neuropsychological perspectives. Topics considered include short-term memory, encoding and retrieval processes, forgetting, memory distortion, implicit memory, drug
effects on memory, amnesic syndromes, and aging memory.

Note: Expected to be given in 2014–15.

Prerequisite: Science of Living Systems 20 or its predecessors plus either Psychology 13, 15, 16, 18, Science B 29 or MCB 80.

[*Psychology 1452. The Human Face*]
Catalog Number: 11513 Enrollment: Limited to 16.
Ken Nakayama
Half course (fall term). Hours to be arranged.
Face recognition and face processing have strong biological substrates and have wide application to many sub-fields of psychology. Among the topics to be examined are face recognition, facial emotion, and facial attractiveness.

Note: Expected to be given in 2013–14.
Prerequisite: Science of Living Systems 20 or its predecessors plus any foundational course.

Psychology 1453. Consciousness Explored - (New Course)
Catalog Number: 17059
Ken Nakayama
Half course (spring term). M., 3–5. EXAM GROUP: 8, 9
The study of consciousness is deemed essential for any serious endeavor to understand the mind and brain. Accordingly, this course will cover a wide range of topics in consciousness studies including: 1) various types of disorders of consciousness, 2) the amount of information your brain can process unconsciously (and how unconscious/subliminal information impacts the types of decisions you make), 3) how something crosses the line from unconscious to conscious in your brain, and 4) whether science can ever fully explain conscious awareness.
Prerequisite: Science of Living Systems 20 or its predecessors and either MCB 80 or Psychology 14 Cognitive Neuroscience.

*Psychology 1502. Cultural Psychology*
Catalog Number: 46453 Enrollment: Limited to 40.
Christine Ma-Kellams
Half course (fall term). Tu., Th., 1–2:30.
How do beliefs associated with social class, race, and religion change psychological tendencies? This course will explore the sticky question of how all (hu)men are not created equal, and the specific ways one’s cultural background shapes your sense of self, emotions, motivation, judgments, and relationships. We will discuss how Madonna influences the way you like your coffee, whether it is wrong to eat your dog, and when thinking about God changes what you do with your money.
Prerequisite: Science of Living Systems 20 or its predecessors and one foundational course.

*Psychology 1503. Psychology of Close Relationships*
Catalog Number: 32801 Enrollment: Limited to 75.
Holly A. Parker
Half course (spring term). Tu., Th., 7:40–9:10 p.m. EXAM GROUP: 18
This course is an in-depth exploration of close relationships. Examples of topics to be covered include the biological bases of attraction; relationship formation; the end of relationships through
break-up, divorce, or death; relationship satisfaction; deception; gender roles; same-sex relationships; loneliness; relationships and well-being; and public perceptions about relationships. You will have an opportunity to explore these topics primarily through critical examination of the empirical literature as well as through popular press.

Prerequisite: Science of Living Systems 20 or its predecessors, and one foundational course.

[*Psychology 1505. Social Cognition: The Psychology of Thinking about Other People*
Catalog Number: 3334 Enrollment: Limited to 20.
Jason P. Mitchell

Half course (spring term). Hours to be arranged.
This course will examine how one person infers the thoughts and feelings of others, predicts what they will do in certain situations, forms impressions of others’ personalities, and manages to engage in culturally-appropriate social behavior. In doing so, we will examine a range of topics, including research on stereotypes and prejudice, knowledge about the self, the development of social skills in children, social deficits in autism and related disorders, and the underlying neural basis of these abilities.

Note: Expected to be given in 2013–14.
Prerequisite: Science of Living Systems 20 or its predecessors and either Psychology 13, Psychology 14, or Psychology 15.

*Psychology 1507. Group Decision Making*
Catalog Number: 83757 Enrollment: Limited to 20.
Nicholas Peter Aramovich

Half course (spring term). M., W., 4–5:30. EXAM GROUP: 9
This course seeks to understand collective decision making and problem solving by small groups. This includes understanding the interpersonal processes and relationships that occur between group members as they work together (e.g., conformity, minority influence, information sharing, and leadership), the effect of group participation on their members (e.g., learning, satisfaction, commitment) and methods for evaluating the quality and effectiveness of group performance. Past and present empirical research and theory will be examined.

Prerequisite: Science of Living Systems 20 or its predecessors and any foundational course.

*Psychology 1512. Changing Minds: Persuasion and Communication*
Catalog Number: 76667 Enrollment: Limited to 25.
Nicole E. Noll

Half course (fall term). M., W., 1–2:30.
Have you ever tried to influence a friend’s stance on a political issue or finagled relatives into supporting a charity walk/run you were participating in? If so, you’ve engaged in persuasion. After a background review of attitudes, including their measurement and relation to behavior, we will explore psychological theories of persuasion. We will also examine applied examples of persuasive communication in such areas as advertising/consumer behavior, politics/voting, and social change (e.g., health behaviors and prejudice).

Prerequisite: Science of Living Systems 20 or its predecessors, and any foundational course.

**Psychology 1513. Industrial/Organizational Psychology - (New Course)**
Catalog Number: 48855
Nicholas Peter Aramovich  
**Half course (fall term). Tu., Th., 10–11:30 and a one-hour section to be arranged. EXAM GROUP: 12, 13**

Designed to provide students with an introduction to the field of Industrial/Organizational (I/O) Psychology, including major theories and research in the field as well as their practical applications to organizations. Specifically, this course will cover the history and research methods of the field as well as topics in industrial psychology (e.g., job analysis, employee recruitment and selection, performance appraisal and management, and employee training and development) and organizational psychology (e.g., work motivation, perceptions of fairness, reactions to stress, diversity, teamwork, and leadership).

**Prerequisite:** Science of Living Systems 20 or its predecessors and one foundational course.

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**Psychology 1514. Us and Them: Challenges and Possibilities in Intergroup Relations - (New Course)**

Catalog Number: 78278

_Elinor Amit_

**Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17**

Why are we so tribal? How do stereotypes arise? When do we act altruistically? What challenges arise from interactions between groups? And what can be done about that? We will address these and other questions, using both theoretical discussions and participatory in-class interactions, modeled after facilitation techniques employed in Palestinian-Israeli dialogue groups. We will consider topics such as social identity, social power and hierarchy, prejudice, perspective taking, and inter-group reconciliation processes.

**Prerequisite:** Science of Living Systems 20 or its predecessors and one foundational course.

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[*Psychology 1551. Mind Perception*]

Catalog Number: 2481 Enrollment: Limited to 20.

_Daniel M. Wegner_

**Half course (spring term). Hours to be arranged.**

Examines processes involved in perceiving the minds of others, and how these processes are modified for exceptional cases such as the minds of animals, robots, children, groups, enemies, victims, supernatural agents, and the dead.

**Note:** Expected to be given in 2014–15.

**Prerequisite:** Science of Living Systems 20 or its predecessors plus any one of Psychology 13, 15, 16, 18, or MCB 80

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[*Psychology 1552. Styles of Thought - (New Course)*]

Catalog Number: 26756 Enrollment: Limited to 20.

_Elinor Amit_

**Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17**

What are thoughts made of? Do we think in pictures or in words? When you’re hungry, do you think about "food" or about "almond pancakes with Vermont maple syrup"? Do children think differently from adults? Who is more creative, a verbal thinker or a visual thinker, and why? Is abstract thinking "deeper" or "better" than concrete thinking? Are pictures more "emotional" than words? And do situational factors play a role in the way we think, or is it all about stable individual differences? In the current seminar, we will think about thinking, and consider the
implications of style of thought for perceptions, judgments, predictions, and our actions in the social world.

Prerequisite: Science of Living Systems 20 or its predecessors and one foundational course.

*Psychology 1556r. Research Seminar in Implicit Social Cognition
Catalog Number: 78884
Mahzarin R. Banaji
Half course (fall term; repeated spring term). Hours to be arranged.
An introduction to research on implicit social cognition, with special focus on attitudes, beliefs, and identity and in some cases its applications to law, business, medicine, and government. Students will be paired with individual researchers to work on ongoing projects that can turn into more independent projects. In addition to weekly work in the laboratory, students are expected to attend biweekly discussion groups focusing on current issues and directions in the laboratory as a whole.

Psychology 1601. Developmental Disabilities
Catalog Number: 10038
Joanna A. Christodoulou
Half course (fall term). M., W., 7–9 p.m. EXAM GROUP: 9
Introduction to developmental disorders through theory, research, and practice. In this course we will focus on the most frequently identified developmental difficulties in areas such as language, math, and executive functions. The approach will be integrative by considering each topic through the lens of cognitive neuroscience, clinical presentation, and theoretical frameworks.

Psychology 1604. Social Development
Catalog Number: 92302
Felix Warneken
Half course (spring term). Tu., Th., 1-2:30, and a one-hour section to be arranged. EXAM GROUP: 15, 16
How do we develop as social beings from infancy to adulthood? What are the biological, cultural, and individual factors that influence this development? How does human social development differ from that of other primates? In exploring these and other questions, this course will take a developmental and evolutionary approach to topics that include: attachment; cultural learning; cooperation and competition; theory of mind; social categorization; moral reasoning; friendship; peers; parent-child interaction. What is social competence, and how can social development go awry? In exploring these and other questions, this course will take a developmental approach to topics that include: attachment; early-emerging social behavior; cooperation and competition; trust; theory of mind; social categorization; in/out-group dynamics; friendship; distinct forms of aggression and victimization; social and moral reasoning; and parental, peer, and cultural influences on social behavior.

Prerequisite: Science of Living Systems 20 or its predecessors plus either Psychology 15 or Science of Living Systems 15.

Catalog Number: 33358 Enrollment: Limited to 15.
Kurt W. Fischer (Education School)
Half course (spring term). M., W., 10–12. EXAM GROUP: 3, 4
Provides an integrative, interactive, and collaborative introduction to Mind, Brain, and Education. Students will draw upon knowledge from Cognitive Psychology, Biology, and Education to explore the theoretical foundations, methods, and applications of MBE. The course will connect diverse theoretical orientations including Piaget, Vygotsky, cognitive/affective science, neuroscience, dynamic skill theory, and universal design for learning. Guest lecturers will include leading scholars in the field. Students will complete a research or design project in the course.
Note: Offered jointly with the Graduate School of Education as HT 100A. Not open to students who have previously taken PSY 1607.
Prerequisite: Science of Living Systems 20 or its predecessors plus any foundational course.

*Psychology 1651r (formerly *Psychology 1651), Language Development: Undergraduate Laboratory Course: Research Seminar
Catalog Number: 6484
Jesse Snedeker 4118
Half course (fall term; repeated spring term). Hours to be arranged.
Students participate in research on language acquisition, language comprehension, and language production. Each student has responsibility for a project. Weekly meeting to discuss student projects and readings that are relevant to them. Ten hours a week commitment (includes lab meeting).
Note: For undergraduates seeking research experience, especially in preparation for undergraduate theses.
Prerequisite: Science of Living Systems 20 or its predecessors plus either Psychology 13 or Psychology 16.

*Psychology 1652r, Laboratory in Early Cognitive Development
Catalog Number: 9913
Elizabeth S. Spelke
Half course (fall term; repeated spring term). Fall: W., at 3; Spring: Hours to be arranged.
EXAM GROUP: Fall: 8
This is a laboratory methods course that provides students with hands-on experience in a cognitive development lab. The aim of the course is for students to engage in all aspects of the scientific process - from experimental design to data collection and interpretation - by working in a lab, and by participating in weekly meetings where key questions and findings in the field are discussed.
Note: Interested students may contact Lab Coordinator Ellyn Schmidt, ellyn.schmidt@gmail.com.

Psychology 1653, Intuitive Math in the Everyday Mind - (New Course)
Catalog Number: 72077
Mariko Moher
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Every day, we evaluate options and make decisions, often without the luxury of time to
deliberate. All of this requires that we perform some kind of math — estimating, counting, comparing — but most of the time, we do it without being aware of "doing math." In this class, we will explore the automatic (and not-so-automatic) psychological processes that underlie these decisions, relying on the biases and errors that exist to gain insight into the underlying computations that inform our everyday decisions. Topics such as cognitive development, attention and memory, mathematical cognition, and judgment and decision making will be covered.

Prerequisite: Science of Living Systems 20 or its predecessors, and any foundational course.

*Psychology 1655r. Conceptual Development: Undergraduate Laboratory Course
Catalog Number: 1865
Susan E. Carey
Half course (fall term; repeated spring term). Hours to be arranged.
Students participate in research on conceptual development and language acquisition. Each student has responsibility for a project. Weekly lab meeting to discuss student projects and readings relevant to them. Ten hours a week commitment (includes lab meeting).
Note: Open to undergraduates seeking research experience, especially in preparation for undergraduate theses.

Psychology 1702. The Emotional Mind
Catalog Number: 7521
Leah Somerville
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Not only do emotions permeate our everyday lives, they have aided in the survival of the human species. But what are emotions, and what are they good for? What causes us to experience an emotion? And how do emotional responses, in turn, influence our perception, memory, decision-making, and psychological well-being? This course will address these questions by drawing on key advances from historical, philosophical, psychological, and neuroscientific perspectives.
Prerequisite: Science of Living Systems 20 or its predecessors plus a foundational course.

Psychology 1703. Human Sexuality
Catalog Number: 7683
Justin J. Lehmiller
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course examines the development and expression of sexual behavior as a complex psychological, socio-cultural, and biological phenomenon. Students explore topics including: historical perspectives on sexuality; sexology research methods; biological bases of sexual behavior; sexual arousal and response; gender identity and gender roles; sexual orientation; romantic attraction and love; sexual dysfunctions and sex therapy; safer sex and STD prevention; typical and atypical sexual behaviors; and pornography and prostitution.
Prerequisite: Science of Living Systems 20 or its predecessors plus any foundational course.

*Psychology 1750 (formerly *Psychology 2751). Free Will, Responsibility, and Law
Catalog Number: 7235 Enrollment: Limited to 15.
Joshua D. Greene
Half course (fall term). M., 2:30–4:30. EXAM GROUP: 7, 8, 9
Examines the issues of free will and responsibility from philosophical, psychological, and neuroscientific perspectives, with special attention paid to potential legal applications.

**Prerequisite:** For undergraduates: Science of Living Systems 20 or its predecessors; plus Psychology 13, 14, 15, 16, 18, or Science of Living Systems 15.

**Psychology 1801. Anxiety Disorders**
Catalog Number: 4906
Richard J. McNally

*Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8*

Concerns current theory and research on the etiology and treatment of anxiety disorders (e.g., panic disorder, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder). Cognitive, behavioral, and biological approaches are emphasized.

**Prerequisite:** Science of Living Systems 20 or its predecessors and Psychology 18.

**Psychology 1802. Childhood Trauma**
Catalog Number: 89958
Instructor to be determined

*Half course (fall term). Hours to be arranged.*

This course will survey literature on the impact of traumatic stress on psychological development, with a special focus on cognitive aspects. Traumatic events, such natural and manmade disasters, maltreatment, community and school violence, war, terrorism, refugee trauma, traumatic loss, medical illness, and accidents, will be discussed. We will attend to questions about the nature of traumatic stress, posttraumatic stress symptoms, cultural aspects, potential risk and protective factors, psychological interventions, and posttraumatic growth following traumatic events.

**Note:** Expected to be given in 2013–14.

**Prerequisite:** Science of Living Systems 20 or its predecessors and Psychology 16 or Psychology 18.

**Psychology 1803. Vulnerability, Stress, and Mental Health - (New Course)**
Catalog Number: 11649
Brandon R. Abbs

*Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8*

Physical and mental stress can affect human brain development and physical health from gestation to adulthood, but how and when does it affect one’s mental health? Can events before you are born affect how your brain responds to stress? What is "resilience" and what personality types are resilient? What are effective mental health treatments when stress is a factor? We focus on links between stress, brain development, and mental illness, asking students to think about causality and developmental events separated by decades. Students may also review available treatments and begin to develop one that might counteract the effects of stress.

**Prerequisite:** Science of Living Systems 20 or its predecessors and Psychology 18.

**Psychology 1804. Personality Disorders - (New Course)**
Catalog Number: 93385
Ian Reed

*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*
What is personality? What differentiates one person’s character from another person’s? What is it about you that makes you... you? In what ways do you get in the way of yourself? These types of questions are easily posed, but remain some of the most difficult to answer in all of psychology. This class examines these questions and applies them to styles ranging from normal to abnormal variants. Moreover, there will be a focus on understanding abnormal personality styles from varying perspectives as well as the ways in which they influence therapy.

Prerequisite: Science of Living Systems 20 or its predecessors, and any foundational course.

[*Psychology 1851. Clinical Psychology: Science and Practice]*
Catalog Number: 6392 Enrollment: Limited to 15.
Jill M. Hooley
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Extends the material covered in Psychology 18 in a more clinical direction. Provides students with an opportunity to approach issues in clinical psychology from a scientist-practitioner perspective. Focuses on how research-based approaches to the study and treatment of psychopathology can translate into high quality ethical care for patients with major psychiatric problems.

Note: Expected to be given in 2013–14.
Prerequisite: Science of Living Systems 20 or its predecessors; Psychology 18; and at least one other course in psychopathology strictly required.

[*Psychology 1853. Self-Destructive Behaviors]*
Catalog Number: 0615 Enrollment: Limited to 25.
Matthew K. Nock
Half course (fall term). Hours to be arranged.
Why do some individuals intentionally engage in behaviors that cause themselves direct bodily harm, such as suicide and self-mutilation? We explore past and current models for understanding self-harm behaviors. We consider the classification, etiology, assessment, and treatment of self-harm behaviors from psychological, developmental, contextual, and biological perspectives.

Note: Expected to be given in 2014–15.
Prerequisite: Science of Living Systems 20 or its predecessors and Psychology 18.

[*Psychology 1854. Schizophrenia: Seminar]*
Catalog Number: 2771 Enrollment: Limited to 20.
Jill M. Hooley
Half course (spring term). Hours to be arranged.
Examines schizophrenia and schizophrenia-spectrum disorders from biological, psychological, and psychosocial perspectives. Focuses on early (e.g., Kraepelin) and modern (e.g., DSM-IV) perspectives, clinical case descriptions of the disorder, and recent theoretical and empirical developments in understanding etiology, phenomenology, and treatment.

Note: Expected to be given in 2014–15.
Prerequisite: Science of Living Systems 20 or its predecessors and Psychology 18.

*Psychology 1861. Developmental Psychopathology*
Catalog Number: 1325 Enrollment: Limited to 25.
John R. Weisz
Half course (fall term). Th., 2:30–5:30. EXAM GROUP: 16, 17, 18
An overview of psychological problems and mental disorders in childhood and adolescence. Topics include internalizing conditions (e.g., anxiety, depression), externalizing conditions (e.g., conduct disorder and ADHD), eating disorders, autism, and child responses to maltreatment and other forms of trauma. Theoretical perspectives, diagnostic criteria, etiology, and treatment approaches are examined.
Prerequisite: Science of Living Systems 20 or its predecessors and Psychology 18.

**Psychology 1900. Introduction to Statistics for the Behavioral Sciences**
Catalog Number: 4016
Nicholas Peter Aramovich
Half course (spring term). M, W, F 10-11, and an additional lab to be arranged. EXAM GROUP: 3
Provides a conceptual and practical introduction to statistics used in psychology and other behavioral sciences. Covers basic topics in statistics including: measures of central tendency and variability; probability and distributions, correlations and regression, hypothesis testing, t-tests, analysis of variance, and chi-square tests. Includes a lab section with instruction in statistical analysis using a computer program.
Note: Open to freshmen with permission of instructor. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

*Psychology 1901a. Methods of Behavioral Research*
Catalog Number: 99655 Enrollment: Limited to 25.
Justin J. Lehmiller
Half course (fall term). M., at 12, and an additional lab section Tu., 2:30–5 or Tu., 7–9:30 p.m. EXAM GROUP: 16, 17, 18
Theoretical and practical introduction to planning, conducting, reporting, and evaluating psychological research. Topics include experimental design, hypothesis generation and testing, experimental artifacts, and analysis of published research.
Prerequisite: One of: Psychology 1900, Statistics 100, 101, 102, 104, or the equivalent.

[*Psychology 1901b. Methods of Behavioral Research*]
Catalog Number: 48133 Enrollment: Limited to 25.
Ken Nakayama
Half course (fall term). M., 12, and a weekly lab W., 7-9:30 or Th., 1:30-4. EXAM GROUP: 5
Theoretical and practical introduction to planning, conducting, reporting, and evaluating psychological research. Topics include experimental design, hypothesis generation and testing, experimental artifacts, and analysis of published research.
Note: Expected to be given in 2013–14.
Prerequisite: One of: Psychology 1900, Statistics 100, 101, 102, 104, or the equivalent.

*Psychology 1901c. Methods of Behavioral Research*
Catalog Number: 11718 Enrollment: Limited to 25.
Christine Ma-Kellams
Half course (spring term). M., at 11, and a weekly lab T., 7-9:30 pm, or W., 2:30-5. EXAM
GROUP: 4
Theoretical and practical introduction to planning, conducting, reporting, and evaluating psychological research. Topics include experimental design, hypothesis generation and testing, experimental artifacts, and analysis of published research.
Prerequisite: One of: Psychology 1900, Statistics 100, 101, 102, 104, or the equivalent.

[*Psychology 1901d. Methods of Behavioral Research]
Catalog Number: 78347 Enrollment: Limited to 25.

Half course (spring term). W., 1:30–4; W., 7–9:30 p.m.
Theoretical and practical introduction to planning, conducting, reporting, and evaluating psychological research. Topics include experimental design, hypothesis generation and testing, experimental artifacts, and analysis of published research.
Note: Expected to be given in 2013–14.
Prerequisite: One of: Psychology 1900, Statistics 100, 101, 102, 104, or the equivalent.

*Psychology 1950, Intermediate Statistical Analysis in Psychology
Catalog Number: 4889
Delphine Sophie Courvoisier
Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7
This course offers intense, foundational exposure to psychological statistics, focusing heavily on analysis of variance (one-way, factorial, repeated-measures, mixed-model). Other topics include: exploratory data analysis, sampling distributions, null hypothesis significance testing, t-tests, fixed versus random effects, post hoc and planned comparisons, correlation, simple regression, the general linear model, chi-square tests, nonparametric statistics, confidence intervals, and meta-analysis.
Note: Required of doctoral students in Psychology.
Prerequisite: Psychology 1900 or the equivalent.

*Psychology 1952, Multivariate Analysis in Psychology
Catalog Number: 6191
James Sidanius
Half course (spring term). Lecture: M., W., 1-2:30; Lab: Th., 5-6:30. EXAM GROUP: 6, 7
This course introduces the empirical measurement of abstract constructs and multivariate analysis. Topics include: reliability and validity, multiple regression, exploratory and confirmatory factor analyses, discriminant function analysis and structural equation modeling.
Prerequisite: Psychology 1900.

Cross-listed Courses

Linguistics 132, Psychosementics

Primarily for Graduates

*Psychology 2010, Contemporary Topics in Psychological Research
Catalog Number: 6515
**Ken Nakayama**  
*Half course (fall term). M., Th., 4–6. EXAM GROUP: 9, 18*  
Advanced survey of research topics in cognition/brain/behavior, development, experimental psychopathology, clinical and social psychology.  
*Note:* Required of, and limited to, first-year doctoral students in the department of Psychology.

*Psychology 2020ab. Cognition, Brain, and Behavior: Proseminar*  
Catalog Number: 7860  
*Steven Pinker and members of the Department*  
*Full course (spring term). Tu., Th., 9:30–11:30.*  
Advanced survey of research topics in cognition, brain, and behavior.  
*Note:* Limited to first-year doctoral students in Psychology.

[*Psychology 2040. Contemporary Topics in Psychopathology ]*  
Catalog Number: 4628  
*Jill M. Hooley*  
*Half course (spring term). Hours to be arranged.*  
Advanced survey of current topics in experimental psychopathology.  
*Note:* Expected to be given in 2013–14. Required of first- or second-year graduate students in clinical. Doctoral students in clinical psychology only.

[*Psychology 2050. History of Psychology: Seminar]*  
Catalog Number: 3378  
*Richard J. McNally*  
*Half course (spring term). Hours to be arranged.*  
Covers major issues, theories, schools of thought, and controversies integral to the development of psychology from the late 19th century to the middle of the 20th century. Readings include classic articles exemplifying these themes.  
*Note:* Expected to be given in 2014–15. Open to undergraduates with permission of instructor.  
*Prerequisite:* For undergraduates: SLS-20 or its predecessors plus any foundational course.

*Psychology 2060. Reward and Self Control - (New Course)*  
Catalog Number: 13358 Enrollment: Limited to 15. For graduate students and upper-level undergraduates with permission of instructor.  
*Joshua William Buckholtz*  
*Half course (spring term). Th., 1–4. EXAM GROUP: 15, 16, 17*  
What’s stopping you from doing absolutely everything that your devious heart desires? The ability to flexibly control our behavior - particularly when it comes to rewarding things like food, sex, and drugs - has huge consequences for our long-term happiness and success. Though we are reasonably good at this as a species, dramatic individual differences in the capacity for self-control are readily apparent. In this class, we will examine the cognitive construct of self-control, its neurobiological underpinnings and sources of individual variation, and relationships to psychopathology.  
*Prerequisite:* Science of Living System 20 or its predecessors and one foundational course.
*Psychology 2110. Emotional Development: Biology, Relationships, Culture
Catalog Number: 1403
Gabrielle Rappolt Schlichtmann (Education School)
Half course (spring term). Th., at 9. EXAM GROUP: 11
The relationship between emotion and cognition is complex. Based in social interaction, emotions are biological processes that organize human behavior by constraining thought and action, while relationships evoke and shape emotions. This course examines foundational work from the classics through modern emotion research about attribution, development, culture, and neuroscience. Questions include: How do relationships and learning shape emotions, and vice versa? What are pathways in the development of emotions? What can emotion sciences bring to practical questions about teaching and learning? Attention to risk and resilience, including poverty, stigmatization, disability, and trauma. Class format combines discussion, case analysis, and lecture.
Note: Offered jointly with the Graduate School of Education as H137.
Prerequisite: Science of Living Systems 20 or its predecessors and any foundational course.

*Psychology 2145. Developmental Cognitive Neuroscience
Catalog Number: 27567 Enrollment: Undergraduates admitted only by permission of instructor.
Susan E. Carey
Half course (spring term). Hours to be arranged.
This course uses neuroscience methods to study the cognitive development of human infants and children. Case studies draw from research on face recognition, language, executive function, representations of objects, number and theory of mind.
Note: Expected to be given in 2014–15.
Prerequisite: Science of Living Systems 20 or its predecessors and one foundational course.

*Psychology 2150r (formerly *Psychology 2150). Social Cognitive Development: Research Seminar
Catalog Number: 29628
Felix Warneken 6303
Half course (fall term; repeated spring term). Hours to be arranged.
Year long lab course on children’s social-cognitive development and the study of cooperation. Students develop and pilot experiments with children or participate in ongoing projects. In addition, students read and discuss papers on social cognition, understanding of norms, and cooperation from developmental and evolutionary psychology.
Note: Open to all undergraduates with permission of instructor.
Prerequisite: For undergraduates: Psychology 1 or Science B 62 plus a foundational course.

*Psychology 2160r. Laboratory for Affective and Developmental Neuroscience - (New Course)
Catalog Number: 23846
Leah Somerville 7050
Half course (fall term; repeated spring term). Hours to be arranged.
Conduct research on emotion processing and/or adolescent socioemotional development, incorporating methods of cognitive neuroscience including functional brain imaging (fMRI). Read and discuss current issues in the fields of affective, cognitive, and developmental
neuroscience.

*Prerequisite:* Science of Living Systems 20 or its prerequisites, and a foundational course.

**Psychology 2170. Developmental Proseminar**
Catalog Number: 6883
Elizabeth S. Spelke, Jesse Snedeker and members of the Department
Half course (fall term). Tu., 11–2. EXAM GROUP: 13, 14, 15
Proseminar in conceptual development and language acquisition.

*Note:* Open to all graduate students in the department and counts as one of the required two major survey courses. Open to others by permission of the instructor.

[*Psychology 2190. Topics in Language Acquisition*]
Catalog Number: 2529
Jesse Snedeker
Half course (fall term). Hours to be arranged.
Seminar examining alternate theories of language acquisition and assessing their empirical validity. Focuses on speech perception, word learning, semantic and early syntactic development, interactions between language acquisition and cognitive development, and children’s online language comprehension.

*Note:* Expected to be given in 2013–14.

**Psychology 2310. Brain Mystery: What is so special about the primate parietal cortex? - (New Course)**
Catalog Number: 85397
Yaoda Xu
Half course (spring term). W., 11–1. EXAM GROUP: 4, 5
Read and discuss papers to understand how the primate parietal cortex supports a wide range of cognitive operations, including attention, visual short-term memory, number representation, episodic memory retrieval, decision making and motor planning.

*Prerequisite:* SLS-20 or its predecessors and either PSY 13, PSY 14, or MCB 80.

**Psychology 2335r. Concepts, Actions, Objects (CAOs): Research Seminar**
Catalog Number: 5121
Alfonso Caramazza
Half course (fall term; repeated spring term). Hours to be arranged.
Discussion of current research on the organization of conceptual and lexical knowledge. We will also discuss ongoing research by participants in the seminar.

*Note:* Open to graduate and undergraduate students involved in research in language. Open to undergraduates with permission of instructor.

**Psychology 2352r. Laboratory for Social Cognitive Neuroscience**
Catalog Number: 6187
Jason P. Mitchell
Half course (fall term; repeated spring term). F., 1:30–3:30. EXAM GROUP: 6, 7, 8
Provides instruction and experience in conducting research on social cognition via the methods of cognitive neuroscience. Special focus on issues of mental state inference, stereotyping, and the
self.

*Psychology 2353, Case Studies of Cognitive and Neural Models - (New Course)
Catalog Number: 46791 Enrollment: Limited to 12. Undergraduates admitted with permission of instructor.
George Angelo Alvarez
Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18
What makes a successful cognitive or neural model? In this seminar, we will do a series of in depth case studies to address this question, exploring several of the more successful cognitive and neural models. While many examples will be drawn from the literature on human vision, the course will also draw on examples from language, development, and higher-level reasoning.
Note: The first meeting of the course will take place on February 7.
Prerequisite: Science of Living Systems 20 or its predecessors plus Psychology 13 or Psychology 14 or MCB 80, or permission of instructor.

*Psychology 2354r, Advanced Laboratory in Cognitive Neuroscience
Catalog Number: 0838
Randy L. Buckner
Half course (fall term; repeated spring term). Hours to be arranged.
Students work directly on a research project and get hands-on experience with neuroimaging and cognitive neuroscience techniques, including functional MRI. MRI laboratory training consists of safety, instruction on running the scanner, and paradigm design. In addition to laboratory work, students attend a weekly research seminar where ongoing and proposed research projects are discusses.
Note: Open to graduate and undergraduate students working in the instructor’s laboratory.

*Psychology 2356r, Visual Cognition: Research Seminar
Catalog Number: 4407 Enrollment: Limited enrollment.
Yaoda Xu, George Angelo Alvarez, and Ken Nakayama
Half course (fall term; repeated spring term). Hours to be arranged.
Discussion of current research on visual cognition (how we perceive, attend to, and remember visual information). We will also discuss ongoing research by participants in the seminar.
Note: Open to graduate and undergraduates who are currently conducting research in the Harvard Vision Lab.

*Psychology 2358r, Memory: Research Seminar
Catalog Number: 0141
Daniel L. Schacter
Half course (fall term; repeated spring term). Hours to be arranged.
Topic to be announced.
Note: Limited to students involved in research.

*Psychology 2400, Cognitive Psychology and Emotional Disorders
Catalog Number: 6138
Richard J. McNally
Half course (fall term). M., 4–6. EXAM GROUP: 9
Research and theory on the application of cognitive psychology methods applied to the understanding of anxiety and mood disorders.
*Note*: Limited to graduate students.

**Psychology 2410r. Laboratory Research on Emotional Disorders**
Catalog Number: 12616
Richard J. McNally
Half course (fall term; repeated spring term). Hours to be arranged.
Involves readings, seminar discussion, and research on emotional disorders conducted in the instructor’s laboratory (e.g., social anxiety disorder, complicated grief, obsessive-compulsive disorder).
*Note*: Open to graduate and undergraduate students working in the instructor’s laboratory.

*Psychology 2420. Cognitive-Behavioral Treatment of Psychological Disorders*
Catalog Number: 8446
Jill M. Hooley
Half course (fall term). W., 11–1. EXAM GROUP: 4, 5
Covers current cognitive-behavioral approaches to the treatment of common psychological disorders in adults. Emphasis is on the practical aspects of treatment, and on treatment outcome research. Includes theoretical underpinnings of cognitive-behavioral therapy.
*Note*: Limited to Harvard graduate students in clinical psychology.

[*Psychology 2430. Cultural and Individual Diversity*]
Catalog Number: 9756
Matthew K. Nock
Half course (fall term). Hours to be arranged.
Examines cultural, racial, ethnic, and other individual differences in human behavior which affect the practice of psychology. Reviews current science examining the relations between these factors and human behavior, psychopathology, and provision of psychological services.

*Psychology 2436r. Social Neuroscience and Psychopathology Laboratory*
Catalog Number: 9962
Christine Hooker
Half course (fall term; repeated spring term). F., 4–6. EXAM GROUP: 9
Provides instruction and experience in conducting research on social cognitive processes as they relate to psychopathology. Cognitive neuroscience methods, such as fMRI, are emphasized.
*Prerequisite*: Psychology 18

[*Psychology 2445. Psychological Treatment Research*]
Catalog Number: 1835
Matthew K. Nock
Half course (spring term). Hours to be arranged.
Review theories of behavior change, methods of studying such change (single-case research
designs, randomized clinical trials, etc.), and current evidence-based approaches to assessing and treating psychopathology. Examines historical, ethical, and cultural issues.

*Note:* Expected to be given in 2013–14. Open to undergraduates with permission of instructor.  
*Prerequisite:* SLS-20 or its predecessors and Psychology 18.

**Psychology 2446r. Clinical Research Laboratory**  
Catalog Number: 5628  
**Jill M. Hooley**  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Provides instruction and experience conducting clinical research in laboratory and clinical settings, with a special focus on severe psychopathology. Topics will include: Self-Injurious behaviors, depression, and adult attachment patterns in close relationships.  
*Note:* Open to graduate and undergraduate students working in the instructor’s laboratory.

[*Psychology 2450. Affective and Social Neuroscience*]  
Catalog Number: 9796  
**Christine Hooker**  
*Half course (fall term). Hours to be arranged.*  
Reviews two emerging fields in neuroscience, affective and social neuroscience. Through integration of human and animal data, the course focuses on mapping affect, motivation, and social cognition to brain function.  
*Note:* Expected to be given in 2013–14. Open to advanced undergraduates with permission of instructor.  
*Prerequisite:* SLS-20 or its predecessors plus any foundational course.

[*Psychology 2451. Psychology of Racism, Prejudice, and Discrimination - (New Course)*]  
Catalog Number: 75368 Enrollment: Limited to 20. Undergraduates admitted with permission of instructor. May not be taken by people who have previously taken African and African American Studies 241  
**James Sidanius**  
*Half course (fall term). Tu., 2–4.*  
This course provides an in-depth and comprehensive exposure to the theoretical and methodological issues within the social psychology of racism and prejudice research. Approaches will include sociology, political science, and anthropology.  
*Prerequisite:* For Psychology concentrators, Science of Living Systems 20 or its predecessors and one foundational course.

[*Psychology 2460. Diagnostic Interviewing*]  
Catalog Number: 4157 Enrollment: Limited to 12.  
**Instructor to be determined**  
*Half course (fall term). Hours to be arranged.*  
Students develop clinical interviewing and diagnostic skills using the Structured Clinical Interview for DSM-III-R and other instruments. Examines issues in diagnosis and assessment; provides exposure to psychopathology syndromes via tapes and clinical interviews.  
*Note:* Expected to be given in 2014–15. Graduate students only.  
*Prerequisite:* Psychology 2040.
**Psychology 2461r. Laboratory for Clinical and Developmental Research**
Catalog Number: 8042
Matthew K. Nock  
*Half course (fall term). Hours to be arranged.*  
Provides instruction and experience in conducting clinical research in laboratory and clinical settings, with a special focus on developmental psychopathology.  
*Note:* Open to graduate and undergraduate students working in the instructor’s laboratory.

**Psychology 2464r. Research Methods in Child & Adolescent Clinical Psychology**
Catalog Number: 4638
John R. Weisz  
*Half course (fall term). Hours to be arranged.*  
Advanced laboratory methods seminar on designing and conducting research on child and adolescent mental health problems and interventions, especially in school and mental health care settings. Problem areas include depression, anxiety, and disruptive conduct.  
*Note:* The class will be conducted at the Judge Baker Children’s Center in Boston.  
Organizational meeting Tues., Sept. 4 at 4 p.m. in the Wm. James 10th floor conference room.  
*Prerequisite:* For undergraduates: Science of Living Systems 20 (or equivalent) and PSY 18 plus a statistics course.

**Psychology 2475r. Laboratory for the Systems Neuroscience of Psychopathology**
Catalog Number: 46912 Enrollment: Open to graduate and undergraduate students working in the instructor’s laboratory.  
Joshua William Buckholtz 1653  
*Half course (fall term; repeated spring term). Hours to be arranged.*  
Research seminar examines the neurobiology of disinhibitory psychopathology (aggression, antisocial behavior, substance abuse). Students participate first-hand in personality/behavioral testing and brain imaging, and in weekly discussions of the genetics and cellular/systems/cognitive neuroscience of disinhibitory psychopathology.

**[*Psychology 2480. Human Neuropsychology/Neuroanatomy: Seminar*]**
Catalog Number: 4335 Enrollment: Limited to 20.  
William P. Milberg (Medical School)  
*Half course (fall term). Hours to be arranged.*  
*Note:* Expected to be given in 2013–14. Preference given to graduate students who have completed Psychology 2010; if space is available, qualified undergraduates may enroll with permission of instructor.  
*Prerequisite:* For undergraduates: Science of Living Systems 20 or its equivalent and any foundational course. MCB 80 is recommended but not required.

**[*Psychology 2500. Advanced Social Psychology*]**
Catalog Number: 5094
Half course (fall term). Hours to be arranged.
Advanced survey of classic and current research and theory in social psychology, including self, social cognition, attitudes, social influence, altruism and aggression, prejudice and discrimination, close relationships, and group dynamics.
Note: Expected to be given in 2013–14. For doctoral students only.

*Psychology 2530r. Mental Control: Research Seminar
Catalog Number: 2364
Daniel M. Wegner  
Half course (fall term; repeated spring term). F., at 12, or another hour to be arranged, and additional research hours to be arranged. EXAM GROUP: 5
This seminar provides research experience in mental control, including topics of mind perception and consciousness.
Note: Limited to graduate students and undergraduates involved in research in the instructor’s laboratory. 
Prerequisite: For undergraduates: Psychology 1 plus any one of Psychology 13, 15, 16, 18, or MCB 80.

*Psychology 2553r. Decision Making and Negotiation: Research Seminar
Catalog Number: 4679
Francesca Gino (Business School)  
Half course (fall term; repeated spring term). Hours to be arranged.
This seminar provides lab experience in behavioral approaches to decision making and negotiation.
Note: Open to students working on research in the instructor’s laboratory. Offered jointly with the Business School as 4425.

*Psychology 2554r. Moral Cognition: Research Seminar
Catalog Number: 9481
Joshua D. Greene  
Half course (fall term; repeated spring term). Hours to be arranged.
Year long lab course for students engaged in research on moral cognition.

*Psychology 2570r. Intergroup Relations: Research Seminar
Catalog Number: 4440
James Sidanius  
Half course (fall term; repeated spring term). Fall: W., 11–12:30; Spring: Th., 2–3:30. EXAM GROUP: Fall: 4, 5; Spring: 16, 17
The seminar provides students with research experience concerning different forms of intergroup relations, including the social psychology of interracial and interethnic conflict and prejudice. Graduate and undergraduate students meet on a weekly basis to discuss ongoing research on psychological mechanisms involved in power, stereotyping, inequality, identity, and ideology. Undergraduate enrollees will work under the supervision of a graduate student in the design and conduct of lab-based and survey experiments, and the input, coding and early analysis of empirical data.
*Psychology 2580r. Affective Forecasting: Research Seminar*
Catalog Number: 4262
Daniel T. Gilbert
Half course (fall term; repeated spring term). Hours to be arranged.
Topic to be announced.
Note: Open to students working on research in the instructor’s laboratory.

[*Psychology 2630. Social Behavior in Organizations: Seminar]*
Catalog Number: 0991
J. Richard Hackman
Half course (fall term). Hours to be arranged.
Topics include how groups and organizations affect individual members and vice versa; interpersonal and group processes; work team effectiveness; power, political, and intergroup dynamics; group and organizational leadership.
Note: Expected to be given in 2013–14. Limited to doctoral students. Students are expected to attend the lectures of Psychology 1501.

*Psychology 2640r. The Understand Seminar*
Catalog Number: 7865
Mahzarin R. Banaji
Half course (fall term; repeated spring term). W., 2:30–4:30. EXAM GROUP: Fall: 7, 8, 9
Topic to be announced.
Note: Open to graduate students involved in research in the instructor’s laboratory, and to select juniors and seniors.

[Psychology 2650. Behavioral Approaches to Decision Making and Negotiation]*
Catalog Number: 7147
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Half course (fall term). Hours to be arranged.
Research overview of behavioral decision making and decision analytic perspectives to negotiation. Explores bounded rationality, decision biases, human decision making. Develops a behavioral decision perspective to negotiation, and examines how the field is currently evolving.
Note: Expected to be given in 2013–14. Offered jointly with the Business School as 4420. Open to juniors and seniors in psychology and economics who are writing, or plan to write, a senior thesis.

[Psychology 2651. Social Cognition from a Developmental and Evolutionary Perspective]*
Catalog Number: 31825 Enrollment: Limited to 15.
Felix Warneken
Half course (fall term). Hours to be arranged.
Includes the representation of agency, intentions, and others’ minds in children and nonhuman primates, the ontogenetic and phylogenetic origins of empathy, cooperative behaviors and norms. Emphasizes new research bridging psychology, anthropology, and behavioral economics.
Note: Expected to be given in 2013–14. Open to advanced undergraduates with permission of instructor.
Psychology 2652. The Psychology of Cooperation - (New Course)
Catalog Number: 52745
Enrollment: Open to advanced undergraduates with permission of instructor.
Felix Warneken
Half course (fall term). Th., 1:30–4. EXAM GROUP: 15, 16, 17
Why and how do humans cooperate? What are the origins of these behaviors in human development and evolution? In this course we discuss how research in psychology, behavioral economics and primatology can provide insight into the foundation of human cooperation. This includes the study of empathy, altruism, fairness, and collaboration.
Prerequisite: Science of Living Systems 20 or its predecessors, and one foundational course.

Psychology 2653. Experimental Methods - (New Course)
Catalog Number: 44307
Francesca Gino (Business School) and William Simpson (Business School)
Half course (spring term). F., 12–3. EXAM GROUP: 5, 6, 7
Provides concepts and tools needed for planning and designing laboratory experiments, and for collecting and analyzing behavioral data, in the study of individuals’ behavior in business, including marketing, organizational behavior, and related disciplines. Includes discussion of methodologies that are used in field experiments and surveys. Provides the foundations for the methodological evaluation of other behavioral researchers’ work. Covers the designs and analyses that are most often used by experimental researchers in psychology, organizational behavior, and marketing. Provides technical skills for the design and implementation of laboratory experiments, including overcoming possible pitfalls and common barriers.
Note: Open to doctoral students only. Offered jointly with the Business School as 4435.

*Psychology 2660r. Research Seminar in Mindfulness Theory
Catalog Number: 4909
Ellen J. Langer
Half course (fall term; repeated spring term). Hours to be arranged.
Mindlessness/mindfulness theory is compared/contrasted to relevant theories in social psychology, psychopathology, and cognitive psychology.

*Psychology 2670a. Decision Making and the Psychology of Possibility
Catalog Number: 1193
Enrollment: Limited to 15.
Ellen J. Langer
Half course (fall term). W., 9:30–11:30. EXAM GROUP: 2, 3, 4
Topics in decision making such as rationality, risk-taking, helplessness, and health are examined through the lens of mindfulness theory. Special emphasis given to the psychology of possibility in applied settings.
Note: Open to qualified undergraduates.
Prerequisite: An introductory psychology course and a foundational course.

*Psychology 2670b. Decision Making and the Psychology of Possibility II
Catalog Number: 3434
Ellen J. Langer
Half course (spring term). Hours to be arranged.
A deeper exploration into the theoretical and experimental issues pertaining to decision making and the psychology of possibility, raised in Psychology 2670a.

Note: Open to qualified undergraduates.
Prerequisite: Psychology 2670a.

Cross-listed Courses

Graduate Courses of Reading and Research

*Psychology 3010. Special Reading and Research
Catalog Number: 7858

*Psychology 3020. Direction of Doctoral Dissertations
Catalog Number: 4492
Members of the Department and others listed under Psychology 3010

*Psychology 3050. Clinical Practicum
Catalog Number: 6299
Richard J. McNally 2978, Jill M. Hooley 1191 and members of the clinical faculty.
Half course (fall term; repeated spring term). Hours to be arranged.
Students work in clinical settings locally and, under supervision, are directly involved in the treatment and clinical care of patients.
Note: Limited to Harvard doctoral students in clinical psychology.

*Psychology 3070. Clinical Assessment and Treatment Practicum
Catalog Number: 4439
Richard J. McNally 2978, Jill M. Hooley 1191 and members of the clinical faculty.
Half course (fall term; repeated spring term). Hours to be arranged.
Faculty interview psychiatric inpatients to demonstrate establishing treatment alliances, gathering histories, and initial assessment. Group discussion will consider how theoretical principles are applied to clinical work.
Note: Limited to graduate students in clinical psychology.

*Psychology 3200. Research Seminar in Clinical Science
Catalog Number: 6455
Joshua William Buckholtz 1653
Half course (fall term; repeated spring term). W., 4–5:30.
Provides a forum for presenting and discussing current research in experimental
psychopathology/clinical psychology. Presenters include graduate students, faculty, and outside speakers.

*Psychology 3220 (formerly *Psychology 2220a). Developmental Studies: Seminar
Catalog Number: 4672
Jesse Snedeker 4118 (spring term only) and Elizabeth S. Spelke 3850 (fall term only)
Research seminar open to graduate students conducting research in cognitive development.

*Psychology 3240. Research Seminar in Cognitive Development
Catalog Number: 5142
Elizabeth S. Spelke 3850
Half course (fall term; repeated spring term). Fall: T., 2–3:30; Spring: Tu., 2:30–4.

[*Psychology 3250. Psychological Testing]*
Catalog Number: 7164
Christine Hooker 5768 (on leave 2012-13)
Half course (spring term). Hours to be arranged.
This weekly seminar for graduate students in clinical psychology is designed to provide basic skills in administering and interpreting standardized tests in the areas of intellectual assessment and personality assessment.
Note: Expected to be given in 2014–15. Open to Harvard doctoral students in clinical psychology.

*Psychology 3260 (formerly *Psychology 2360). Conceptual Development: Research Seminar
Catalog Number: 6601
Susan E. Carey 4113 (on leave 2012-13)
Covers research methods for the study of conceptual development throughout the life span. All students must be currently engaged in experimental research.

*Psychology 3270 (formerly *Psychology 2270). Language Acquisition: Research Seminar
Catalog Number: 0770
Jesse Snedeker 4118
Half course (fall term; repeated spring term). Hours to be arranged.
Covers research methods for language acquisition and language comprehension throughout the life span. All students must be currently engaged in experimental research.

*Psychology 3340. Research Seminar in Cognition, Brain, and Behavior
Catalog Number: 1754
George Angelo Alvarez 6093 and Yaoda Xu 6094
Half course (fall term; repeated spring term). Th., 12–1:30.
Researchers in CBB, including graduate students, postdoctoral fellows, and faculty, present and discuss current research in cognitive science. Topics include memory, language, vision, mental imagery, concepts, animal and infant cognition, and related areas.
*Psychology 3360. Current Topics in Vision and Sensory Processes
Catalog Number: 0604
George Angelo Alvarez 6093, Ken Nakayama 2558, and Yaoda Xu 6094

*Psychology 3420. Research Workshop in Social Psychology
Catalog Number: 7610
Joshua D. Greene 5594
Half course (fall term; repeated spring term). Tu., 12–1:30.
Provides a forum for the presentation, discussion, and critique of current research in social psychology. Presenters include graduate students and faculty in social psychology plus visitors.

*Psychology 3490. Advanced Statistical Methods Workshop
Catalog Number: 8235
Delphine Sophie Courvoisier 3210
Half course (spring term). Hours to be arranged. EXAM GROUP: 5
Questionnaire development: this workshop will provide a step-by-step description of how to transform the idea of a new construct into a valid and reliable scale. This includes how to develop the questions, how to pretest the scale, and how to run the validation study, as well as a presentation of the main statistical analyses performed to test scale reliability, internal and construct validity (e.g. Cronbach alpha, principal component and factor analysis, Bland and Altman plots). Time will be divided equally between presentations and a hands-on practicum using SPSS or R (choice of the participants). The practicum will be on a real-data example and will cover the whole process of analyzing a validation study data.

*Psychology 3500. Psychological Science: Talking Points
Catalog Number: 5341
Steven Pinker 4733
Half course (spring term). Th., 4–6.
A graduate companion course to "Psychological Science," which explores the theories and controversies in greater depth. Topics include genetics, evolution, cognitive neuroscience, perception, development, consciousness, social psychology, personality, psychopathology, violence, sex, and morality.
Note: Enrollment is limited to teaching fellows for “The Human Mind” and graduate students who have obtained the permission of the instructor.

*Psychology 3550. Teaching Psychology
Catalog Number: 0853
Mahzarin R. Banaji 4258
Half course (fall term; repeated spring term). M., at 12.
Note: Limited to and required of Sophomore Tutors.

*Psychology 3555. Instructional Styles in Psychology
Catalog Number: 6831
Jesse Snedeker 4118 and members of the Department.
Note: Normally required of and limited to department graduate students who are first-time teaching fellows.
[*Psychology 3600. The Origins of Knowledge: Talking Points*]
Catalog Number: 0489
Elizabeth S. Spelke 3850
*Half course (spring term). Hours to be arranged.*
Graduate companion course to Origins of Knowledge, which explores the theories and controversies in greater depth. Topics include the evolutionary, cultural, and ontogenetic origins of representational capacities, including space, number, objects, agents, language, and intuitive theories.
*Note:* Expected to be given in 2013–14. Limited to students in the Psychology Department or to those who have obtained permission of the instructor.

[*Psychology 3610. Leadership and Group Behavior: Research Seminar*]
Catalog Number: 5748
J. Richard Hackman 1504
*Half course (fall term). W., 12–2.*
Workshop on theory and methods that are relevant to the conduct of empirical research on purposive groups. Participation is restricted to students who are conducting such research.

[*Psychology 3800. Psychometric Theory*]
Catalog Number: 0607
Richard J. McNally 2978
*Half course (fall term). Hours to be arranged.*
Covers basic psychometric theory and methods essential for reliable and valid measurement. Also covers conceptual issues in the assessment of individual differences (e.g., intelligence, personality).
*Note:* Expected to be given in 2013–14. Limited to Harvard graduate students in clinical psychology.

[*Psychology 3900 (formerly *Psychology 2900). Professional Ethics*]
Catalog Number: 6702
Jill M. Hooley 1191
*Half course (spring term). Tu., 1–3.*
Examines ethical principles and legal issues involved in the practice of psychology, with an emphasis on clinical psychology. Covers ethical principles and code of conduct; uses case examples to highlight the application of these principles.
*Note:* Limited to graduate students.

**Public Policy**
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

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Erich Muehlegger, Associate Professor of Public Policy (Kennedy School)
Rohini Pande, Mohamed Kamal Professor of Public Policy (Kennedy School)
Ryan Sheely, Assistant Professor of Public Policy (Kennedy School)
Stephen Martin Walt, Robert and Renee Belfer Professor of International Affairs at the J. F. K. School of Government (Kennedy School)
Richard J. Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy in the John F Kennedy School of Government (Kennedy School)

The doctoral program in Public Policy trains qualified candidates to shape the direction of public policy research and to prepare the next generation of teachers for programs in public policy. It also qualifies individuals to perform high-level policy analysis and prepares them for positions of leadership in the public sector. Interested applicants should contact the John F. Kennedy School of Government for application material.

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solution of a substantive problem. A few methodological theses concentrate on developing new analytic techniques, their usefulness to be demonstrated through explicit application to a policy issue.

For more information about the doctoral program, visit the program website at www.hks.harvard.edu/degrees/phd

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Faculty of the Committee on the Study of Religion

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M. Shahab Ahmed, Associate Professor of Islamic Studies (spring term only)
Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures
David L. Carrasco, Neil L. Rudenstine Professor for the Study of Latin America in the Faculty of Divinity and the Faculty of Arts and Sciences (on leave spring term)
Diana L. Eck, Fredric Wertham Professor of Law and Psychiatry in Society
Marla F. Frederick, Professor of African and African American Studies and of Religion (on leave 2012-13)
Luis M. Girón Negrón, Professor of Romance Languages and Literatures and of Comparative Literature
William Albert Graham, Murray A. Albertson Professor of Middle Eastern Studies and University Distinguished Service Professor (on leave 2012-13)
Janet Gyatso, Hershey Professor of Buddhist Studies (Divinity School)
Helen Hardacre, Reischauer Institute Professor of Japanese Religions and Society
David Neil Hempton, Dean of the Faculty of Divinity, John Lord O’Brien Professor of Divinity and Alonzo L. McDonald Family Professor of Evangelical Theological Studies (Divinity School)
Michael D. Jackson, Distinguished Visiting Professor of World Religions (Divinity School)
Baber Johansen, Professor of Islamic Religious Studies (Divinity School)
Karen L. King, Hollis Professor of Divinity (Divinity School)
Courtney Bickel Lamberth, Lecturer on the Study of Religion
David Lamberth, Professor of Philosophy and Theology (Divinity School)
Laura S. Nasrallah, Professor of New Testament and Early Christianity (Divinity School)
Jacob Olupona, Professor of African and African American Studies and Professor of African Religious Traditions
Parimal G. Patil, Professor of Religion and Indian Philosophy
Kimberley C. Patton, Professor of the Comparative and Historical Study of Religion (Divinity School)
Elisabeth Schüssler Fiorenza, Krister Stendahl Professor of Divinity (Divinity School)
Jonathan Lee Walton, Plummer Professor of Christian Morals, Pusey Minister in the Memorial Church, and Assistant Professor of African American Religions (Divinity School)
Malika Zeghal, Prince Alwaleed Bin Talal Professor in Contemporary Islamic Thought and Life

Other Faculty Offering Instruction in the Study of Religion

Leila N. Ahmed, Victor S Thomas Professor of Divinity (Divinity School)
Giovanni Battista Bazzana, Assistant Professor of New Testament (Divinity School)
Aisha Mahina Beliso-De Jesus, Assistant Professor of African American Religions (Divinity School)
François Bovon, Frothingham Professor of the History of Religion (Divinity School)
Ann D. Braude, Director of the Women’s Studies in Religion Program (Divinity School)
Janet Browne, Aramont Professor of the History of Science, Harvard College Professor (on leave 2012-13)
Emily Ann Click, Lectecter on Ministry Studies (Divinity School)
Francis X. Clooney, Parkman Professor of Divinity and Professor of Comparative Theology (Divinity School)
Nancy F. Cott, Jonathan Trumbull Professor of American History (on leave 2012-13)
Harvey G. Cox, Jr., Professor of Divinity, Emeritus (Divinity School)
Francis Fiorenza, Charles Chauncey Stillman Professor of Roman Catholic Theological Studies (Divinity School)
K. Healan Gaston, Lecturer on American Religious History (Divinity School)
William Albert Graham, Murray A. Albertson Professor of Middle Eastern Studies and University Distinguished Service Professor (on leave 2012-13)
David D. Hall, Professor of Divinity, Emeritus (Divinity School)
Charles Hallisey, Yehan Numata Senior Lecturer in Buddhist Literatures (Divinity School)
Jay M. Harris, Harry Austryn Wolfson Professor of Jewish Studies and Dean of Undergraduate Education
Albert Henrichs, Eliot Professor of Greek Literature (on leave spring term)
Evelyn Brooks Higginbotham, Victor S. Thomas Professor of History and of African and African American Studies
Amy Hollywood, Elizabeth H. Monrad Professor of Christian Studies (Divinity School)
Beverly M. Kienzle, John H. Morison Professor of the Practice of Latin and Romance Languages, Lecturer on Medieval Christianity, Director of Language Studies (Divinity School)
Arthur Kleinman, Esther and Sidney Rabb Professor of Anthropology in the Faculty of Arts and Sciences and Professor of Medical Anthropology in the Faculty of Medicine, Harvard College Professor (on leave spring term)
James T. Kloppenberg, Charles Warren Professor of American History (on leave 2012-13)
Helmut H. Koester, John H. Morison Research Professor of Divinity and Winn Research Professor of Ecclesiastical History (Divinity School)
Jon D. Levenson, Albert A. List Professor of Jewish Studies (Divinity School)
Peter Machinist, Hancock Professor of Hebrew and Other Oriental Languages
Kevin J. Madigan, Winn Professor of Ecclesiastical History (Divinity School)
Daniel P. McKanan, Ralph Waldo Emerson Unitarian Universalist Association Senior Lecturer in Divinity (Divinity School)
Everett I. Mendelsohn, Professor of the History of Science, Emeritus
David G. Mitten, James Loeb Professor of Classical Art and Archaeology, Emeritus
Anne E. Monius, Professor of South Asian Religions (Divinity School)
Roy Mottahedeh, Gurney Professor of History (on leave spring term)
Stephanie A. Paulsell, Amory Houghton Professor of the Practice of Ministry Studies (Divinity School)
Ahmed Ragab, Richard T. Watson Assistant Professor of Science and Religion (Divinity School)
Mayra Rivera Rivera, Assistant Professor of Theology and Latina/o Studies (Divinity School)
Bronwyn Conwell Roantree, College Fellow in the Committee on the Study of Religion
P. Oktor Skjaervo, Aga Khan Professor of Iranian (on leave spring term)
Charles Stang, Associate Professor of Early Christian Thought (Divinity School)
Leonard W. J. van der Kuijp, Professor of Tibetan and Himalayan Studies
Mara Willard, Visiting Lecturer (Divinity School)
Preston N. Williams, Houghton Research Professor of Theology and Contemporary Change (Divinity School)

Courses listed in this section are offered by the Committee on the Study of Religion and by various departments. The Committee is responsible for the program of concentration for undergraduates in the Comparative Study of Religion and for the program of studies leading to the PhD in The Study of Religion. Undergraduate concentrators may, with the prior approval of the Director of Undergraduate Studies, take courses offered by other departments and by the Divinity School for credit toward concentration requirements. Candidates for higher degrees also should consult other sections of this catalog relevant to their programs and the catalog of the Divinity School. Cross registration is required for all Divinity School courses. Many courses have separate requirements for undergraduate, masters, and doctoral students, and wherever possible also have separate discussion sections.

All courses cross-listed from General Education are found in the Primarily for Undergraduates Cross-listed Courses sections. These courses, with some exceptions, may be taken by graduate students.

Courses numbered 10–999 are Primarily for Undergraduates; 1000–1999, For Undergraduates and Graduates; and 2000–2999, Primarily for Graduates. Courses numbered 11-20 are specially designed introductory courses to the Study of Religion, for potential concentrators and declared concentrators. Declared concentrators are required to complete one of these courses.

Courses are distributed according to their last three digits in the following sections:

000–099 General: Comparative and Methodological
100–199 Ancient Near Eastern and Israelite
200–299 Judaic
300–349 Greek, Hellenistic, and Roman
400–499 Christianity
500–599 Modern Western/Religions of the Americas
600–699 Hinduism and South Asia
700–799 Buddhism
800–899 Islam
900–949 African and Afro-Atlantic Religions
950-999 Chinese and Japanese Religions

**Tutorials in the Comparative Study of Religion**

*Primarily for Undergraduates*

**Religion 91r. Supervised Reading and Research**
Catalog Number: 8046
Courtney Bickel Lamberth
*Half course (fall term; repeated spring term). Hours to be arranged.*
Study of special topics in the history and comparative study of religion on an individual or small-group basis.
*Note:* May not be taken Pass/Fail. Normally open only to concentrators. Permission by Director of Undergraduate Studies required.

**Religion 97 (formerly *Religion 97a and 97b). Tutorial — Sophomore Year**
Catalog Number: 2313
Courtney Bickel Lamberth
*Half course (spring term). Th., 2–4.*
Introduction to methods and theories in the study of religion, including major themes and arguments that have defined the field. Course emphasizes critical thinking and writing skills.
*Note:* Required of concentrators.

**Religion 98a. Tutorial — Junior Year**
Catalog Number: 2832
Courtney Bickel Lamberth
*Half course (fall term; repeated spring term). Hours to be arranged.*
Part of the sequence of small seminars focused on critical thinking and writing skills for concentrators, this course provides in-depth study of selected themes, texts, traditions or time periods.

*Religion 98b. Tutorial — Junior Year
Catalog Number: 2922
Courtney Bickel Lamberth

Half course (fall term; repeated spring term). Hours to be arranged.

Part of the sequence of small seminars focused on critical thinking and writing skills for concentrators, this course provides in-depth study of selected themes, texts, traditions or time periods.

Note: Required of concentrators.

*Religion 99. Tutorial — Senior Year
Catalog Number: 6498
Courtney Bickel Lamberth

Full course. Fall: Th., 3–5; Spring: Th., 4–6.

A required component of the senior year tutorial is a biweekly seminar, led by the Assistant Director of Undergraduate Studies. Covers research methods and strategies in thesis writing.

Note: Required of concentrators writing a thesis.

Introductory Courses

Primarily for Undergraduates

Religion 11. World Religions Today
Catalog Number: 4811
Diana L. Eck

Half course (spring term). M., W., F., at 10; F., at 11; F., at 11. EXAM GROUP: 3

An introduction to five of the world’s religious traditions --Hindu, Buddhist, Jewish, Christian, and Muslim-- through the voices of modern adherents and interpreters of the tradition. Readings from Gandhi, the Dalai Lama, Emil Fackenheim, Pope John Paul II, Tariq Ramadan, and others. How do people in each tradition articulate their faith in the context of globalization, pluralism, and the issues of today? What are the tensions within traditions? What are the dialogues between traditions?

Note: Offered jointly with the Divinity School as 3220.

Religion 12. Critical Issues in the Comparative Study of Religion
Catalog Number: 55486
Bronwyn Conwell Roantree

Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

The aim of this course is to introduce students to key categories in the study of religion, both within a comparative context and with significant attention to theoretical and methodological issues in the field. The specific topic of the course will vary from year to year. Topic examples include: scripture, ethics, ritual, body and practice, art, violence, gender and sexuality.
Note: Topic for 2013: Religion, Self and Society. This course examines the ways in which
religion (broadly construed to include beliefs, texts and institutions) structures and mediates the
relationship between the individual and the state in both productive and problematic ways.
Reading works of fiction (novels, poetry) together with theoretical materials (scripture,
philosophy) the course will engage traditions including Hinduism, Christianity, Buddhism,
Jainism, Judaism, Islam and traditional African religions comparatively across time and space.
Texts will include: Monkey, Things Fall Apart and The Gods Will Have Blood.

*Religion 20. Ethnographies of Religion, Texts and Contexts
Catalog Number: 46043 Enrollment: Limited to 20.
Malika Zeghal
Half course (fall term). Tu., Th., 10–11:30 and hour to be arranged. EXAM GROUP: 12, 13
The course presents ethnographic works on Religion in the humanities and social sciences and
introduces students to the concept and practice of ethnography.
Note: Offered jointly with the Divinity School as 2001.

Religion 40. Incarnation and Desire: An Introduction to Christianity
Catalog Number: 22186
Courtney Bickel Lamberth
Half course (fall term). Tu., Th., 1–2:30; . EXAM GROUP: 15, 16
The course offers an introduction to Christian thought by considering major texts, figures and
ideas from the first century to the present in their changing cultural contexts. Central themes
include the categories of body, flesh and soul; free will, desire and sin in relation to divine grace;
and the meaning of incarnation. Texts include canonical and non-canonical early Christian
literatures, Patristic and medieval texts, Reformation theologies, as well as modern and
contemporary authors. Students will develop a sense of the distinguishing features of the
Christian world view, while gaining an appreciation for the significant diversity across the
tradition
Note: This course, when taken for a letter grade, meets the General Education requirement for
Culture and Belief or the Core area requirement for Literature and Arts C. This course fulfills the
requirement that one of the eight General Education courses also engage substantially with Study
of the Past.

Religion 50. Religion, Law and American Politics - (New Course)
Catalog Number: 18768
Bronwyn Conwell Roantree
Half course (fall term). M., W., 1–2:30; . EXAM GROUP: 6, 7
The evolving relationship between law and religion has had a profound influence on American
political life and discourse since the country’s founding. This course explores the complex
relationship between religion and the law from the earliest debates about the limitations of state
power to compel conscience in the Massachusetts Bay Colony to the prominent role religious
discourse about law - as well as legal discourse about religion - have played in the 2012
elections.
Note: Will draw on various primary sources, including Supreme Court decisions, public speeches
and political pamphlets. This course, when taken for a letter grade, meets the General Education
requirement for United States in the World or the Core area requirement for Literature and Arts
C. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 30 (formerly Literature and Arts A-92). Love In A Dead Language: Classical Indian Literature and Its Theorists]
[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
[Culture and Belief 16 (formerly Folklore and Mythology 100). Performance, Tradition and Cultural Studies: An Introduction to Folklore and Mythology]
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
[Culture and Belief 28. Hindu Worlds of Art and Culture]
[Culture and Belief 31 (formerly Philosophy 19). Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion]
[Culture and Belief 32. Back Roads to Far Places: Literature of Journey and Quest]
[Economics 1776. Religion and the Rise of Capitalism]
*Freshman Seminar 43m. Psychology of Religion
[Societies of the World 22. Asia in the Making of the Modern World]

General: Comparative and Methodological

Primarily for Undergraduates

Religion 110. Religion and International Politics
Catalog Number: 49158
Bronwyn Conwell Roantree
Half course (spring term). M., W., 1 to 2 and hour to be arranged. EXAM GROUP: 6
Rather than slowly disappearing from the world stage as advocates of the secularization thesis predicted, religious actors and arguments are a vital - and often unpredictable - force the world over. This course grounds an investigation into thematic questions such as the relationship between religion and regime, religion and human rights and religion and the politics of identity in a series of case studies drawn from Africa, Europe, the United States and the Middle East.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or Societies of the World, but not both. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
[Culture and Belief 13. The Contested Bible: The Sacred-Secular Dance]
[Culture and Belief 14. Human Being and the Sacred in the History of the West]
Culture and Belief 23 (formerly Literature and Arts C-70). From the Hebrew Bible to
2012-2013 Previous Courses of Instruction

**Judaism, From the Old Testament to Christianity**
[Culture and Belief 28. Hindu Worlds of Art and Culture]
[Culture and Belief 32. Back Roads to Far Places: Literature of Journey and Quest]
[Culture and Belief 39 (formerly Literature and Arts A-93). The Hebrew Bible]
**Ethical Reasoning 20 (formerly Humanities 11). Self, Serenity, and Vulnerability: West and East**
[Ethical Reasoning 26. The Ethics of Atheism: Marx, Nietzsche, Freud]
*Freshman Seminar 42k. Comparative Law and Religion*
*Freshman Seminar 43y. Where Does Your Morality Come From?*
*History 83c. Care of the Soul*
*Social Studies 98li. Protest and Violence in Asia: Ethnicity, Religion, and Other Motivations*
*United States in the World 32 (formerly Religion 1007). The World’s Religions in Multicultural America: Case Studies in Religious Pluralism*
*United States in the World 33 (formerly African and African American Studies 193). Religion and Social Change*

**For Undergraduates and Graduates**

**Religion 1004. Modern Spiritual Pioneers and Religious Revolutionaries - (New Course)**
Catalog Number: 34334 Enrollment: Limited to 12.
*Harvey G. Cox, Jr. (Divinity School)*
*Half course (fall term). M., 4–6. EXAM GROUP: 9*
Using biographical and auto-biographical and other sources we will engage the lives of some of the key figures who, nurtured by a variety of religious and spiritual traditions, made a significant difference in their worlds. Depending on the interests of the students, among those who might be considered are Leo Tolstoy, Mohandas Gandhi, Aimee Semple McPherson, Dietrich Bonhoeffer, Lech Walesa, Thich Nhat Hahn, Oscar Romero, Dorothy Day, Abraham Joshua Heschel and Martin Luther King.
*Note: Offered jointly with the Divinity School as 2142.*

**Religion 1008. Theories and Methods in the Study of Religion**
Catalog Number: 78933 Enrollment: May only be taken for a letter grade.
*Charles Hallisey (Divinity School)*
*Half course (spring term). W., 2-4 and an hour to be arranged. EXAM GROUP: 7, 8*
This course, required of all first-year MDiv students but open to all, serves as an introduction to various approaches to the academic study of religion, from the anthropological and sociological to the philosophical and theological.
*Note: Offered jointly with the Divinity School as 4515.*

**Religion 1009. Religion, Gender, and Politics in Transnational Perspective**
Catalog Number: 9774
*Ann D. Braude (Divinity School) and Leila N. Ahmed (Divinity School)*
*Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8*
The use of gender as a category of analysis has transformed the study of religion. This course will explore a range of topics in women’s studies across a range of religious contexts. Members
of the faculty will introduce issues of women and gender from their specific disciplinary and theoretical perspectives.

*Note:* Offered jointly with Divinity school as 3223.

**Religion 1010. The Deep: Purity, Danger, and Metamorphosis**

*Catalog Number: 9495*  
*Kimberley C. Patton (Divinity School)*  
*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*

Reflecting upon the many supernatural constructions of natural elements in lived religion, this comparative course examines metaphysical, mythical, and ritual responses to the sea, including its multiple and conflicting roles as arena of pilgrimage, catharsis, primordial generation, rebirth, desolation, or apocalypse.

*Note:* Offered jointly with the Divinity School as 3817.

**Religion 1013. Poetry and Religion - (New Course)**

*Catalog Number: 38162 Enrollment: Limited to 15.*  
*Michael D. Jackson (Divinity School)*  
*Half course (fall term). Tu., 12–2. EXAM GROUP: 14, 15*

This course explores human experience at the limits of *logos* (‘reason,’ ‘word,’ or ‘rational principle’), when normal habits of thought and rules of social location are lost or disrupted, when we confront sides of ourselves that ordinarily do not see the light of day, yet from which new modes of consciousness and expression may emerge - a penumbral zone that Wallace Stevens alluded to in his image of ‘the palm at the end of the mind,’ standing ‘beyond thought’, on ‘the edge of space,’ while a gold-feathered bird sings in the palm ‘without human meaning, without human feeling, a foreign song.’ Several (mainly modernist) poets and poems will be scheduled for discussion (including Wallace Stevens, Emily Dickinson, Gerard Manley Hopkins, T.S. Eliot, W.H. Auden, Dylan Thomas, Elizabeth Bishop, Anna Akhmatova, Philip Larkin, Ted Hughes, Carol Ann Duffy, Sylvia Plath), but students are invited to work with poets of their own choosing.

*Note:* Offered jointly with the Divinity School as 3722.

**Religion 1017. The Shock of the New - (New Course)**

*Catalog Number: 89684*  
*Michael D. Jackson (Divinity School)*  
*Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11*

This course will explore the impact of unprecedented events, overwhelming experiences and radical technological innovation on both human beings and the life worlds to which they belong. It will cover some of the epistemological, ethical, social and existential quandaries that constitute what Robert Hughes calls ‘the shock of the new’, as well as the religious and ritual strategies whereby people struggle to avert, accommodate, cope with and comprehend massive changes to their lives. Interpretive perspectives will be drawn from psychology, philosophy, ethnography, ethology and biomedicine, while specific empirical cases will cover new media of communications and information processing, new genetic technologies, medical crises (disabilities, organ transplantation, trauma and epidemic disease), as well as culture contact and culture shock.

*Note:* Offered jointly with the Divinity School as 3256.
Religion 1025a. Anthropology of "the Religious" Part 1: Theory
Catalog Number: 57625
Aisha Mahina Beliso-De Jesus (Divinity School)
Half course (fall term). Tu., 12–2 and hour to be arranged. EXAM GROUP: 14, 15
Conducting fieldwork with groups and people based on their religious/spiritual beliefs requires a complex understanding as well as critical knowledge of both the theory and methods of the "field research" process. The first semester will focus primarily on theoretical questions/problems in the study of religion in anthropology, including what is a field site, how is it constituted, and how do we understand our own research and theory in relation to other academic projects?
Note: Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 3103.

*Religion 1025b. Anthropology of "the Religious" Part 2: Methods
Catalog Number: 72732 Enrollment: Limited to 15.
Aisha Mahina Beliso-De Jesus (Divinity School)
Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8
This year-long course will provide students with an in-depth and critical survey of theory and methodological approaches towards an anthropology of "the religious." The second semester is a methodological workshop, where students will be required to conduct method-intensive weekly projects. Students will be required to think about what their research means to the communities they intend to work with as well as questions of positionality, the divide between participant/observer, new forms of research methods and other problematics of research.
Note: Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 3104. Prerequisite: Satisfactory completion of Religion 1025a.

[Religion 1026. Introduction to Justice and Rights]
Catalog Number: 69236
Francis Fiorenza (Divinity School)
Half course (fall term). Hours to be arranged.
This course seeks to give an introduction to contemporary discussions about justice, human rights, and religion. It will survey the conceptions of rights within political theology and within contemporary theories of justice. Special attention will be given to the work of Rawls, Habermas, Nussbaum, Sen, Walzer, Sandel, Motlmann, Woltersdorf, and Schmitt. It will seek to show how a conception of human rights relates to religion with the framework of a discourse ethics.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2801.

[Religion 1042. Religious Tourism]
Catalog Number: 82663 Enrollment: Limited to 20.
Aisha Mahina Beliso-De Jesus (Divinity School)
Half course (fall term). Th., 4–6. EXAM GROUP: 18
This seminar will explore the relationship between "religion" and "tourisms." This engagement will juxtapose conceptions of "religion" encompassed broadly within ritual, spiritual, diasporic and esoteric practices-as-tours. We will read ethnographies of religious tourisms in different trans-local sites, exploring the engagement with issues of commodification and religion, religion and the state, religion and nationalisms, and the inciting of touristic desires.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3105.
Religion 1055. Apocalypse Now/2012: How the World Ends (or Doesn’t) in Human Societies - (New Course)
Catalog Number: 55847
David L. Carrasco
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
This course speaks to the rumors, fears, symbols, theologies and rituals of preparation for the end of the world in 2012 through a comparative study of millennial dreams, apocalyptic prophecies, alternative communities and social catastrophes found in various religious and cultural expressions and events. We examine apocalyptic and millennial themes found in Maya, Christian, Jewish, Buddhist, atomic bombing, Holocaust literature and revolutionary, and cargo cult traditions. We will ‘read’ a range of cultural expressions including books, films, paintings, novels and television shows portraying the contemporary fascination with end of the world scenarios.
Note: Offered jointly with the Divinity School as 3165.

Religion 1059. God, Hindu and Christian
Catalog Number: 7091
Francis X. Clooney (Divinity School)
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course reflects on God in historical, theological, and spiritual terms, attending to classical Christian and Hindu traditions. Issues include: the definition of "God;" proof’s for God’s existence; God’s relationship to the world, humans; divine embodiment; grace, revelation, way of knowing God. Treated also is the reflexive question: how might comparative study change our understanding of God? Paired with Hindu Goddesses and the Virgin Mary, this course does not specifically treat gender-related issues.
Note: Offered jointly with the Divinity School as 3751.

Religion 1095. Ritualization, Play, and Transitional Phenomena - (New Course)
Catalog Number: 53269
Michael D. Jackson (Divinity School)
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
The focus of this course is less on institutionalized rituals, viewed as framed and identifiable forms of social action, than on ritualization - on the everyday strategies, tactics and routines of ‘playful’ and ‘magical’ action whereby people manipulate words, gestures, emotions, bodies, objects and images in an effort not only to control and comprehend their relationship with the world but to change the way the world appears to them, particularly in times of separation and transition, change or crisis. Like play and fantasy, the process of ritualization is an intrinsic aspect of everyday life, evident in the ways human beings compose stories, furnish and clean their home-spaces, cook and eat meals, read a newspaper, court, joke, argue, mourn, give gifts and converse. Crucial to all these actions is the process of transferring or projecting thoughts and emotions onto non-immediate objects or persons in an attempt to symbolically or vicariously grasp and transform confusing, contradictory or chaotic inner experiences.
Note: Offered jointly with the Divinity School as 3818.

Cross-listed Courses
African and African American Studies 187. African Religions
[Anthropology 1935. Secularism in Question: Seminar]
*Folklore and Mythology 167. Charms, Rituals and Speech Acts: Theories of Magic in Performance - (New Course)
[History 1326. The Frankfurt School and Religion: Conference Course]
[History of Science 101. Knowledge on the Move: Cultures of Science in the Medieval World]
[Islamic Civilizations 103. Orientalism: Old and New Perspectives]
*Psychology 980j. Psychology of Religion
[Sociology 121. Religion in a Globalizing World]

Primarily for Graduates

Catalog Number: 0644
Amy Hollywood (Divinity School)
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
An examination of the study of religion from early modernity to the present, with attention to key thinkers, methods, and theories.
Note: Limited to first-year doctoral students. Offered jointly with the Divinity School as 4599.

Catalog Number: 0803 Enrollment: Limited to 15.
Helen Hardacre and Anne E. Monius (Divinity School)
Half course (spring term). W., 4–6. EXAM GROUP: 9
An engagement with the theoretical and methodological issues that scholars of religion deem to be the most urgent and compelling in the discipline today, across the various research areas.
Note: Limited to second-year doctoral students in the Study of Religion.

Religion 2010. Space and Place - (New Course)
Catalog Number: 68376 Enrollment: Limited to 15.
Michael D. Jackson (Divinity School)
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
This course is a cross-cultural exploration of human modes of constructing, experiencing and conceptualizing the dynamic relationship between abstract space and particular or intimate places, between natural or built environments and human subjects, between macrocosm and microcosm.
Note: Offered jointly with the Divinity School as 3808.

Religion 2047. Orthodoxy: Truth, Authority, Law - (New Course)
Catalog Number: 64753
M. Shahab Ahmed
This course explores the concept and the social and intellectual phenomenon of orthodoxy (literally: true opinion or straitened belief). Orthodoxy is commonly defined as truth or sound belief according to an authoritative norm (Encyclopaedia of Religion). The aim of the course is
to stimulate students to think deeply about how truth-claims come to be established in community as authoritative, normative and natural; that is, as the truth exemplified in the phrase, We hold these truths to be self-evident. The historical relationship between truth and authority will be treated through a close reading of relevant theory and case studies drawn from different fields (including history, philosophy, literary criticism, cultural studies, sociology, psychology, religion, history of science, media studies, and jurisprudence) with particular attention to the influence of social, institutional, political and discursive formations. Students should emerge from the course with an informed understanding of the processes by which truth is effected and invested, and with a developed ability to interrogate and deconstruct that which is presented as being true, normative and just.

Note: Offered jointly with the Harvard Law School as HLS 2297. First meeting will be Monday, September 10th.

Cross-listed Courses

[Anthropology 2085. Archaeology of Ritual and Religion]
[*Comparative Literature 211. Mysticism and Literature: Seminar]

Graduate Courses of Reading and Research

*Religion 3005. Doctoral Colloquium in Religion, Gender, and Culture
Catalog Number: 8016 Enrollment: Limited by instructor permission.
Leila N. Ahmed (Divinity School) 3308
Half course (spring term). Alternate Wednesdays, 4-6.
The colloquium will explore key-topics and works in women’s/gender/feminist studies in religion.
Note: Required for doctoral students in Religion, Gender, and Culture. Interested ThM, MTS, and MDiv students please contact the instructor. May be taken on a Sat/Unsat basis only. Offered jointly with the Divinity School as 2698.

Ancient Near Eastern and Israelite

Primarily for Undergraduates

Cross-listed Courses

[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]

For Undergraduates and Graduates

Cross-listed Courses

Ancient Near East 100. History of the Ancient Near East:
Ancient Near East 102. Introduction to Mesopotamian Religion
Ancient Near East 107. History and Historiography in the Ancient Near East
Ancient Near East 111. Law in the World of the Bible
Ancient Near East 120a. Introduction to the Hebrew Bible/Old Testament 1: Pentateuch and Former Prophets
Ancient Near East 120b. Introduction to the Hebrew Bible/Old Testament 2: Latter Prophets and Writings
[Ancient Near East 126. History of the Religion of Ancient Israel]
Ancient Near East 132. Ancient Jewish Wisdom Literature
Ancient Near East 134. Genesis: Narrative Artistry and Theological Meanings
Anthropology 1065. The Ancient Near East
Anthropology 1155. Before Baghdad: Cities of Ancient Mesopotamia
[Sumerian 146. Sumerian Religious Literature]

**Primarily for Graduates**

**Cross-listed Courses**

[Ancient Near East 225. The Greek Bible in History and Theology: Seminar]
[*Comparative Literature 211. Mysticism and Literature: Seminar]*
*Hebrew 200r. Problems in the Literature, History, and Religion of Ancient Israel: Seminar*

**Judaic**

**Primarily for Undergraduates**

**Cross-listed Courses**

[Aesthetic and Interpretive Understanding 29 (formerly Literature and Arts A-48). Modern Jewish Literature]
Culture and Belief 23 (formerly Literature and Arts C-70). From the Hebrew Bible to Judaism, From the Old Testament to Christianity
Culture and Belief 27 (formerly Jewish Studies 55). Among the Nations: Jewish History in Pagan, Christian and Muslim Context
[Culture and Belief 39 (formerly Literature and Arts A-93). The Hebrew Bible]
[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]
*Freshman Seminar 37q. Great Jewish Books*
[Societies of the World 35. Conditional Equality: The Case of the Jews of Europe in Modern Times]

**For Undergraduates and Graduates**

[Religion 1212a. Judaism: The Liturgical Year]
Catalog Number: 5679
Jon D. Levenson (Divinity School)
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
An introduction to the Jewish tradition through an examination of its liturgical calendar. The ancient Near Eastern affinities and biblical forms of the Jewish holidays; the observance of the holidays in rabbinic law, their characteristic themes as developed in rabbinic non–legal literature, their special biblical readings, the evolution of the holidays over the centuries, contemporary theological reflection upon them. Emphasis on classic texts, focus on theological and literary issues.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1667a.

**[Religion 1212b. Judaism: The Liturgical Year]**
Catalog Number: 8074  
*Jon D. Levenson (Divinity School)*
Half course (spring term). Tu., Th., at 11:30. EXAM GROUP: 13, 14  
A continuation of Religion 1212a.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1667b.  
**Prerequisite:** Religion 1212a.

**[Religion 1260. Midrash: Jewish Biblical Interpretation in the Rabbinic Period]**
Catalog Number: 2424  
*Jon D. Levenson (Divinity School)*
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14  
An introduction to the way the rabbis of the Talmudic period interpreted their Bible. Close reading in English of a range of midrashic literature: halakhic and aggadic, exegetical and homiletical, Tannaitic and Amoraic. Emphasis will be placed on literary assumptions and theological affirmations. Some consideration will be given to the affinities and contrasts of midrash with early Christian biblical interpretation and with contemporary literary theory.

*Note:* Expected to be given in 2015–16. Offered jointly with the Divinity School as 3669.

Cross-listed Courses

**[Jewish Studies 129. Josephus]**
**[Jewish Studies 136. Jews and Greeks, Judaism and Hellenism]**
**Jewish Studies 138. The Synagogue and Jewish Community** - (New Course)
**[Jewish Studies 139 (formerly History 1020). Jews and Judaism in the Ancient World]**  
**[Jewish Studies 149. Topics in the Dead Sea Scrolls: Exegesis at Qumran]**  
*Jewish Studies 170. Job and the Problem of Suffering*

Primarily for Graduates

Cross-listed Courses

*Comparative Literature 211. Mysticism and Literature: Seminar*
*Hebrew 200r. Problems in the Literature, History, and Religion of Ancient Israel: Seminar*
*Hebrew 208r. Literature of Israel: Seminar*
*Hebrew 217. The Medieval Torah Commentary: A Practical Introduction: Seminar*
*Hebrew 218. Joseph and Esther: Seminar*
**Hebrew 235. The Binding of Isaac (Aqedah): Seminar**
[Hebrew 236. Song at the Sea: Seminar]
[Jewish Studies 207. Rewriting Scripture in Jewish Antiquity: Seminar]
[Jewish Studies 215. Jewish Law from Qumran to the Mishnah: Seminar]

**Greek, Hellenistic, Roman**

**Primarily for Undergraduates**

**Cross-listed Courses**

**Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization**

**For Undergraduates and Graduates**

**Religion 1305. Emerging Topics in Greek Religion**
Catalog Number: 5630 Enrollment: Limited to 15. Application for enrollment must be completed at first class meeting.
*Kimberley C. Patton (Divinity School)*
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Offers an intensive survey of important work on "new" topics in ancient Greek religion: e.g., magic; talismanic and apotropaic beliefs and practices; miasma and catharsis; the use of curse tablets and binding spells; lamentation; the semiotic and narrative values of cloth, tapestry, and other women’s handwork; the multifaceted role of sacred images in cult and society; social aspects of sanctuaries; dreams; dance; time; the popular construction of evil.
*Note:* Offered jointly with the Divinity School as 3815.
*Prerequisite:* No language prerequisite; some background in ancient Greek religion preferred.

**Religion 1315. Prophecy, Ecstasy, and Dreams in Early Christian World**
Catalog Number: 7435
*Laura S. Nasrallah (Divinity School)*
Half course (fall term). M., W., at 11. EXAM GROUP: 4
In the ancient Mediterranean world, prophecies, ecstasies, and dreams were considered important ways in which the divine communicated with humans. This course explores the history of early Christian debates over prophecy and ecstasy and places them within the broader context of Greek, Jewish, and Roman religions. We shall read various philosophical, theological, novelistic, and political texts from roughly the first century BCE-fourth century CE, as well as a dream manual. The course will address questions of how these debates over prophecy and ecstasy connect with issues of power, gender, and religious identity.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Literature and Arts C. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. Offered jointly with the Divinity School as 1546.

**Religion 1320. The Mystical Theology of Dionysius Areopagite**
Catalog Number: 42342 Enrollment: Limited to 15.
Charles Stang (Divinity School)
Half course (spring term). Hours to be arranged.
A close reading of Pseudo Dionysius Areopagite, the early sixth century theologian who is widely regarded as the foremost spokesman of the apophatic or negative mystical tradition. Presumes knowledge of Greek.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1748.

Cross-listed Courses

[Jewish Studies 136. Jews and Greeks, Judaism and Hellenism]

Primarily for Graduates

Catalog Number: 4069 Enrollment: Limited to 12.
Laura S. Nasrallah (Divinity School)
Full course (spring term). W., 1:30–4 and field trips to be arranged. EXAM GROUP: 6, 7, 8
The first half of the course introduces students to archaeological data from the Graeco-Roman world (inscriptions, architecture, sculpture, coins). The second half consists of seminars in Greece and Turkey during May and on-site meetings with archaeologists.
Note: Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 1870.
Prerequisite: Greek and French or German; two half-courses in the study of ancient Christianity and/or Greco-Roman religion, history, and archaeology. Course may be divided with permission of instructor.

Christianity

For additional courses on Christian Studies, see the catalog of the Divinity School.

Primarily for Undergraduates

Cross-listed Courses

[Culture and Belief 31 (formerly Philosophy 19). Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion]
Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the Culture of Medieval Rus’
[Culture and Belief 39 (formerly Literature and Arts A-93). The Hebrew Bible]
[Culture and Belief 48 (formerly Literature and Arts A-70). God, Justice, and the Book of Job]
*Freshman Seminar 31n. Beauty and Christianity
*Freshman Seminar 38n. Dead and Loving It?: The Cult of the Saints in the Late Antique and Medieval Eastern Mediterranean

For Undergraduates and Graduates
Religion 1400. Introduction to the New Testament: History and Interpretation
Catalog Number: 4486
Elisabeth Schüssler Fiorenza (Divinity School)
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
The diverse writings of the New Testament emerged in the variegated social, religious and political contexts of the Roman empire and are written by the followers of a Jewish teacher who was killed by Roman imperial power. We will discuss major analytical tools and disciplinary methods for analyzing and interpreting these texts and their socio-historical worlds. The course will also explore how these ancient texts still shape contemporary cultural and religious discourses and are read differently in different socio-political and religious locations.
Note: Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 1202.

Religion 1401. Early Christian Thought 1: The Greek Tradition
Catalog Number: 4950
Charles Stang (Divinity School)
Half course (fall term). Tu., Th., 11:30–1 and hour to be arranged. EXAM GROUP: 13, 14
This introductory course will focus on the major Greek authors of the late antique Christian East (third through eighth centuries). Authors will include Origen, Antony the Great, Athanasius, Basil of Caesarea, Gregory of Nazianzus, Gregory of Nyssa, Evagrius of Pontus, Cyril of Alexandria, Pseudo-Dionysius the Areopagite, Maximus the Confessor, and John of Damascus.
Note: Offered jointly with the Divinity School as 1749.

Religion 1402. Early Christian Thought 2: The Latin Tradition
Catalog Number: 2577
Charles Stang (Divinity School)
Half course (spring term). Tu., Th., 11:30–1, and an hour to be arranged. EXAM GROUP: 13, 14
This introductory course will focus on the major Latin authors of the late antique Christian West (second through ninth centuries). Authors will include Tertullian, Ambrose, Jerome, Augustine, Cassian, Gregory the Great, Boethius, and John Scottus Eriugena.
Note: Offered jointly with the Divinity School as 1750.

[Religion 1406. The Gospel of Matthew]
Catalog Number: 81638
Giovanni Battista Bazzana (Divinity School)
Half course (spring term). Hours to be arranged.
The course will be devoted to a reading and interpretation of the Gospel of Matthew. The exegetical discussion of the text of Matthew will focus on textual, literary, historical, and theological matters employing a number of different hermeneutical approaches.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 1549.

Religion 1410. Women, Sex, and Gender in Ancient Christianity
Catalog Number: 9539 Enrollment: Limited to 25.
Karen L. King (Divinity School)
Half course (fall term). W., 1–4. EXAM GROUP: 6, 7, 8
The course will examine early Christian practices and controversies around sex and gender,
including women’s leadership roles, sexual differentiation, and gender performance.

*Note:* Offered jointly with the Divinity school as 1505.

**Religion 1415. Gospel Parables in their Social Context - (New Course)**
Catalog Number: 24764
Giovanni Battista Bazzana (Divinity School)
*Half course (fall term). M., W., at 10 and hour to be arranged. EXAM GROUP: 3*
The course will focus on a reading of some selected parables taken from the canonical and non-canalional Gospel tradition. Attention will be given to the way in which these narratives reflect, refashion and, more generally, interact with the social context of the ancient eastern Mediterranean. In addition, the course will examine how the scholarly tradition has posited the problem of the relationship between these materials and the ancient social context and the ideological stakes involved.

*Note:* Offered jointly with the Divinity School as 1562.

**Religion 1416. Feminist Biblical Interpretation**
Catalog Number: 3002
Elisabeth Schüssler Fiorenza (Divinity School)
*Half course (spring term). W., 2-4, and an hour to be arranged.*
This course is an introduction to the emerging field of feminist biblical studies. We will discuss different biblical texts, hermeneutical approaches, methods of interpretation, and theoretical perspectives. Special attention will be given to the ethics of interpretation, and the significance of feminist hermeneutics for contemporary theological reflection and religious leadership. Lectures, group discussions, and presentations seek to foster a participatory, democratic style of learning.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1504.

**Religion 1418. The Apostle Paul: His Letters, His Cities, and His Legacy**
Catalog Number: 7092
Helmut H. Koester (Divinity School)
*Half course (fall term). Th., 2-4 and hour to be arranged. EXAM GROUP: 16, 17*
Addresses the entire Pauline Corpus. Beginning with the genuine letters of Paul in the New Testament it will demonstrate the developments attested in canonical and apocryphal writings that assumed the mantle of Paul’s authority after his death. Archaeological materials will elucidate the cultural and religious world of Paul’s cities.

*Note:* Offered jointly by the Divinity School as 1525.

Catalog Number: 0072 Enrollment: Limited to 15.
Kevin J. Madigan (Divinity School)
*Half course (spring term). F., 2–4. EXAM GROUP: 7, 8*
A study of the exegesis and reception of the Gospel of Luke in history, stressing the interpretation of the Gospel in the period ca. 200–1600. After studying Luke in its original context, the seminar will turn to commentaries, sermons, and artistic representations of all or parts of the Gospel, as well as to hermeneutical theory from the ancient world.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1872/2229.  
*Prerequisite:* A major research language (Latin, Greek, or Syriac) helpful, but not required.
**Religion 1425. Greek Exegesis of the Gospel of John - (New Course)**
Catalog Number: 91393 Enrollment: Limited to 15.
Giovanni Battista Bazzana (Divinity School)
*Half course (spring term). T., 2–4 and hour to be arranged. EXAM GROUP: 16, 17*
The course will be devoted to a close reading and interpretation of the Gospel of John. The Greek text will be discussed with specific attention paid to literary structures, textual critical issues, historical context, and history of interpretation.
*Note:* Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 1538.

[Religion 1427. Orthodoxy and Heresy in Ancient Christianity]
Catalog Number: 3574
Karen L. King (Divinity School)
*Half course (spring term). Hours to be arranged.*
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 1700.
*Prerequisite:* Introduction to the New Testament or History of Ancient Christianity, or the equivalent.

Religion 1429. Augustine and His Heretics
Catalog Number: 59969 Enrollment: Limited to 15.
Charles Stang (Divinity School)
*Half course (spring term). Tu., 4–6. EXAM GROUP: 18*
This course will survey Augustine of Hippo’s theological career through the lens of his encounters with three "heresies" of Roman North Africa: Manichaeism, Donatism, and Pelagianism. Particular attention will be paid to following themes: evil, freedom, the will, and selfhood.
*Note:* Offered jointly with the Divinity School as 1752.

*Religion 1430. Origen, Evagrius, and Cassian - (New Course)*
Catalog Number: 39871 Enrollment: Limited to 15.
Charles Stang (Divinity School)
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*
This course examines the writings of three early Christian thinkers from the third through fifth centuries: Origen of Alexandria, Evagrius of Pontus, and John Cassian. Particular attention will be paid to the following themes: theological anthropology (with special attention to the concept of the nous), protology (creation and the fall), eschatology (apokatastasis or universal salvation), prayer, practical and contemplative asceticism, and the so-called "allegorical" interpretation of scripture.
*Note:* Offered jointly with the Divinity School as 2608.
Religion 1434. History of Western Christianity, 150-1100
Catalog Number: 5783
Kevin J. Madigan (Divinity School)
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course is designed to provide a historical overview of the Church and society in western Europe from the fourth through the twelfth century. Thus, this course will investigate late-antique and early medieval Christianity in its social and its cultural context. Narrative and theological story lines to be pursued will include the varieties of early Christianity; relations with the Roman state (including persecution of Christians by it); the emergence of normative or "early Catholic" Christianity; early and early medieval monasticism; the search for the Christian doctrine of God and Christ; early Christian architecture, piety and worship; Christianity and other world religions, especially Judaism and Islam; western and eastern Christianity; the emergence of the Roman primacy; the Christianization of the north of Europe; the nature of parochial Christianity; the emergence of the pope, in the eleventh century, as an international religious force; the crusades; and early medieval piety. We will also be strengthening our skills as interpreters of primary sources. Some attention will be paid to major historiographical issues. Note: Offered jointly with the Divinity School as 2230.

[Religion 1437. History of Western Christianity: 1100–1500]
Catalog Number: 5997
Kevin J. Madigan (Divinity School)
Half course (spring term). Tu., Th., 12–1:30. EXAM GROUP: 14, 15
Church and society in western Europe during the high and late Middle Ages. Particular attention will be paid to theological and institutional change and continuity and to popular religious movements.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2250.

[*Religion 1438. The Friars and Their World, ca. 1100–1325*]
Catalog Number: 0851 Enrollment: Limited to 15.
Kevin J. Madigan (Divinity School)
Half course (fall term). F., 2–4. EXAM GROUP: 7, 8
Focus on secondary texts in English pertaining to origins and development of Franciscan Order in high Middle Ages. Examination of these studies as a way into social and religious worlds of thirteenth and fourteenth centuries. Central themes: issues surrounding poverty, the burgeoning split between the "spiritual" and "conventual" wings of the order, heresy and inquisition, apocalyptic thought and the evolution of papal attitudes towards the order. Concludes by considering literary and filmic representations of selected themes.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2252.

Religion 1467. Historical Jesus - (New Course)
Catalog Number: 61179
Giovanni Battista Bazzana (Divinity School)
Half course (spring term). M., W., at 10. EXAM GROUP: 3
The course will introduce the students to the history of the quest for the historical Jesus by examining the most relevant methodological issues and by reviewing the ideological and socio-political stakes in this enterprise that has been intertwined to the cultural history of the western
world from the XVIII to the XXI century.

*Note:* Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 1277.

**Religion 1468. Religion in America: From the Coming of the Europeans to the 1870s**
Catalog Number: 2509
*David D. Hall (Divinity School)*
*Half course (spring term). M., W., at 10, and an hour to be arranged. EXAM GROUP: 3*
Encompassing both mainstream and insurgent, popular or new forms of religion (e.g., the Society of Friends, Mormonism, African-American Protestantism), this survey course deals with the history of Christian thought; changing patterns of religious practice, especially in relation to gender; and religion and society in the context of the regulating and/or liberating reform movements of the nineteenth century.

*Note:* Offered jointly with the Divinity School as 2303.

**Religion 1470. Christian Perspectives on War and Peace - (New Course)**
Catalog Number: 18697
*Mara Willard (Divinity School)*
*Half course (spring term). M., W., at 11, and an hour to be arranged. EXAM GROUP: 4*
Can a Christian rightly kill at the command of the state? How can gospel injunctions for peacemaking be reconciled with a need for the justice and security of the neighbor? This course introduces the diversity of Christian teachings and practices informing norms of war and peace from the bible to the present. Students will become conversant in ethical debates on the relationship between Christianity and nationalism, including the doctrine of the "two kingdoms," the Just War tradition, and civil disobedience. Our historical case studies will explore the interplay of theory and practice surrounding holy war, missionaries and colonial conquest, conscientious objection, and the justice of nuclear deterrence.

*Note:* Offered jointly with the Divinity School as 2760.

**Religion 1472. The Ethical and Religious Thought of Martin Luther King, Jr.**
Catalog Number: 8761
*Preston N. Williams (Divinity School)*
*Half course (spring term). M., 4–6. EXAM GROUP: 9*
A study of the life, thought, and actions of Martin Luther King, Jr. An ethical analysis of his primary concepts, ideas, and strategies based upon a reading and discussion of his writings and their sources.

*Note:* Expected to be offered annually. Offered jointly with the Divinity School as 2721.

**Religion 1477. Christian Ethics and Modern Society - (New Course)**
Catalog Number: 23531
*Mara Willard (Divinity School)*
*Half course (fall term). M., W., at 11, and an hour to be arranged. EXAM GROUP: 4*
This course provides an introduction to Christian ideals of conduct, character, and community, as well as modern disputes over their interpretations and applications. Readings will provide an introduction to ethical theory, with special emphasis on topics of sexuality and marriage, the environment, and the role of religion in public life. It will also ask how claims regarding Christian beliefs and conduct have been shaped by the challenges regarding sexism, racism, class
exploitation, and religious pluralism/secularism. The course also questions how specific roles — including those of ministry, pastoral care, and policy making — relate to conflicts within and surrounding Christian communities and traditions.

*Note:* Offered jointly with the Divinity School as 2754.

**Religion 1480. Protestant-Catholic Relations in America, 1600-2000 - (New Course)**
Catalog Number: 30174 Enrollment: Limited to 25.
K. Healan Gaston (Divinity School)
Half course (spring term). M., W., at 11 and hour to be arranged. EXAM GROUP: 4
This course examines Protestant-Catholic relations in America from the Reformation era to the present and considers how American history, literature, thought, politics, and culture have been shaped by the rich and continuously evolving interplay between these traditions.

*Note:* Offered jointly with the Divinity School as 2305.

**Religion 1496. Histories, Theologies and Practices of Christianity - (New Course)**
Catalog Number: 46072
Daniel P. McKanan (Divinity School) and Emily Ann Click (Divinity School)
Half course (fall term). Tu., Th., at 9 and an hour to be arranged. EXAM GROUP: 11
This course offers a historical, theological, and practice-based introduction to Christianity. We will explore key episodes in Christian history and central themes of Christian theology, highlighting the diversities of culture, ideology, gender, and practice that have characterized Christianity throughout its history. We will use integrative case studies as well as readings from the disciplines of church history, systematic theology, and practical theology to discover the many insights that emerge at the intersections of these disciplines.

*Note:* Offered jointly with the Divinity School as 2600.

**Cross-listed Courses**

[Celtic 151. The Literature of Medieval Celtic Christianity: The Hagiographical Tradition]
Classical Studies 160. Greek East and Latin West after Antiquity: The Birth of Europe - (New Course)
History 1155. Early Modern Europe, 1450-1789 - (New Course)
[History 1167 (formerly Historical Study B-18). The Protestant Reformation]
[History 1214. Encountering of the Other: The Expansion of the Christian West, 1650-1830]
Philosophy 117. Medieval Philosophy

**Primarily for Graduates**

*Religion 2420. Papyrology and Early Christianity - (New Course)*
Catalog Number: 76286 Enrollment: Limited to 10.
Giovanni Battista Bazzana (Divinity School)
Half course (fall term). Tu., 12–2. EXAM GROUP: 14, 15
The course will introduce students to papyrology through the reading of literary and documentary papyri, with a particular emphasis placed on materials pertaining to religious
history in the Greco-Roman world.
Note: Expected to be offered again in 2014-15. Offered jointly with the Divinity School as 1534.

[Religion 2435. High Medieval Christianity]
Catalog Number: 24608
Kevin J. Madigan (Divinity School)
Half course (fall term). F., 12–2.
Advanced historical investigation, topics include: the papacy and reform, new religious orders, medieval thought and growth of universities, piety and devotion, Christianization on periphery of Europe, Rome and Constantinople, the Friars, heresy and its repression, Christianity and the other (Judaism, Islam, etc.).
Note: Expected to be offered again in 2014–15. Offered jointly with the Divinity School as 1534.
Prerequisite: Religion 1434/HDS 2230 and Religion 1437/HDS 2250 or equivalent.

[Religion 2440. Late Medieval Christianity]
Catalog Number: 91237
Kevin J. Madigan (Divinity School)
Half course (spring term). F., 12–2.
Advanced investigation, topics include: papacy at Avignon, the Great Schism, the observantine reform of several medieval religious orders, late medieval thought, mysticism, late-medieval heresy and, especially, analysis of recent literature investigating question of continuity and discontinuity with sixteenth-century Christianity.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2295.
Prerequisite: Religion 1434/HDS 2230 and Religion 1437/HDS 2250 or equivalent.

Religion 2444. Sacrifice: Christian Theology, Discourse & Practice in the Landscape of Ancient Mediterranean Religion - (New Course)
Catalog Number: 85983 Enrollment: Limited to 12.
Karen L. King (Divinity School)
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
This course will critically examine ancient Christian attitudes, rhetorics, and ritual practices in light of the wider Mediterranean religious landscape, focusing on the theologies-ideologies, discourses, and practices of sacrifice.
Note: Offered jointly with the Divinity School as 1710.

Religion 2450. New Testament Ethics and Theology - (New Course)
Catalog Number: 97093 Enrollment: Limited to 10.
Elisabeth Schüssler Fiorenza (Divinity School)
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
This seminar will explore the problem of N*T Ethics and The*logy and focus on both the ethics of interpretation and the reconstruction of the*ethical discourses in the N*T. Special attention will be given to how the rhetoric of empire as well as of democracy has shaped the ethos, symbolic worlds, and rhetorical practices of early Christians and still shape political and religious practices today.
Note: Offered jointly with the Divinity School as 1882.
Religion 2470. Body and Flesh: Christian Metaphors in Contemporary Theory - (New Course)
Catalog Number: 70876
Mayra Rivera Rivera (Divinity School)
Half course (fall term). Tu., 12–2, and hour to be arranged. EXAM GROUP: 14, 15
"The body" is a ubiquitous category in contemporary theory. It is often invoked as a solution to the devaluation of flesh and materiality and yet "the body" is also described as an effect of arrangements of power. It is conceived as subjective interiority and yet used as a metaphor of collective identity. Christianity is accused of devaluing the body and yet philosophers complain that the notion is still too Christian. This course will explore these tensions as it assesses the influence of Christian ideas in contemporary "secular" discussions. Readings will include texts by Maurice Merleau-Ponty, Frantz Fanon, Jean Luc Nancy, Linda Martin Alcoff, in addition to Christian texts that are most frequently cited in the these debates, such as the gospels, Tertullian, and Augustine.
Note: Offered jointly with the Divinity School as 2570.

[Religion 2479. Theopoetics and Theopolitics]
Catalog Number: 66355 Enrollment: Limited to 15.
Mayra Rivera Rivera (Divinity School)
Half course (spring term). Tu., 12–2. EXAM GROUP: 14, 15
This course will explore approaches to God-talk that emphasize - both in content and in style - its character as intellectual discourse as well as creative practice. It will engage various contemporary "theopoetic" and "poethics" works to theorize their understandings of the relationship between the imagination, the world, and the divine. Readings will include philosophical and theological texts, including works by Rubem Alves, Hélène Cixous, Catherine Keller, Édouard Glissant, and others.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2457.

Cross-listed Courses

[Comparative Literature 211. Mysticism and Literature: Seminar]
[History 2340hf (formerly *History 2340). Readings in American Intellectual History]
*Medieval Studies 202. Latin Palaeography and Manuscript Culture: Seminar
Medieval Studies 223. Preaching and the Sermon in the Middle Ages

Graduate Courses of Reading and Research

Catalog Number: 6026 Enrollment: Limited to 12.
Laura S. Nasrallah (Divinity School) 4834
Half course (throughout the year). Alternate Tu., 12–2.
Note: A course available to ThM, ThD, and PhD candidates, and qualified MTS and MDiv students with permission of the instructor. Required for ThM candidates in the field and for ThD and PhD candidates until the term following successful completion of general exams. Expected
to be offered annually. Offered jointly with the Divinity School as 1980.  
Prerequisite: Intermediate competency in at least one of the following ancient languages is required: Greek, Latin, Coptic.

Catalog Number: 8507 Enrollment: Limited to 8.  
Laura S. Nasrallah (Divinity School) 4834  
Half course (throughout the year). Alternate Tu., 12–2.  
Note: Expected to be offered annually. Offered jointly with the Divinity School as 1995.

Modern Western/Religions of the Americas

Primarily for Undergraduates

Cross-listed Courses

Culture and Belief 20 (formerly Historical Study A-27). Reason and Faith in the West  
Ethical Reasoning 15 (formerly Moral Reasoning 54). “If There is No God, All is Permit ted:” Theism and Moral Reasoning  
[Ethical Reasoning 26. The Ethics of Atheism: Marx, Nietzsche, Freud]  
[*History 84i. Secularization in Europe and the United States, c. 1780-2000]  
Societies of the World 30. Moctezuma’s Mexico: Then and Now (2012)!  
[*Sociology 98Kc. Religion in America] - (New Course)  
*United States in the World 32 (formerly Religion 1007). The World’s Religions in  
Multicultural America: Case Studies in Religious Pluralism  
Religion and Social Change]

For Undergraduates and Graduates

Religion 1506. Gender, Race, and Transformation Latina Theory - (New Course)  
Catalog Number: 55769  
Mayra Rivera Rivera (Divinity School)  
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15  
One of the distinctive features of Latina theory is its reluctance to compartmentalize knowledge  
along categories of gender and sexuality, race and ethnicity, activism and spirituality, or  
philosophy, religion, and literature. This course focuses on works that exemplify such  
interdisciplinary theoretical approach. Readings will include works by Gloria Anzaldúa, Laura  
Pérez, María Lugones, Chela Sandoval, and Ana Castillo, among others.  
Note: Offered jointly with the Divinity School as 2466.

[*Religion 1529. The Holocaust and the Churches, 1933-45]  
Catalog Number: 8653 Enrollment: Limited to 15.  
Kevin J. Madigan (Divinity School)  
Half course (spring term). F., 2–4. EXAM GROUP: 7, 8
This course will be an historical study of the systematic, bureaucratic annihilation of European Jewry by the Nazi regime during the Second World War. It will also be an historical study of what the Protestant and Catholic churches and individual Christians did and did not do—how they stood by, collaborated with or resisted the Nazis during the emigration, expropriation, persecution, ghettoization, deportation and annihilation of their Jewish neighbors. It will close with a brief study of some of the philosophical and religious implications of the Holocaust.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2293.

[Religion 1533. Attention and Engagement in Contemporary American Poetry]
Catalog Number: 68875 Enrollment: Limited to 12.
Amy Hollywood (Divinity School)
Half course (spring term). Hours to be arranged.
An exploration of the interplay of aesthetics, politics, and religion in contemporary American poetry. Poets to be read will likely include Juliana Spahr, Claudia Rankine, Susan Howe, Dan Beachy-Quick, C.D. Wright, Elizabeth Robinson, Lisa Robertson, Anne Carson, Jorie Graham, Myung Mi Kim, and Harryette Mullen.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2611.

[Religion 1537 (formerly Political Theology, Justice, and Rights). Introduction to Political Theology]
Catalog Number: 5652
Francis Fiorenza (Divinity School)
Half course (spring term). Hours to be arranged.
This course will explore contemporary issues within political theology, its relation to diverse theories of justice, and the significance of human rights. It deals with the relation between political theology and the foundations of social ethics, justice, rights, and theology, as well as the relation between ethical and religious reflection and the social construction of reality. Special emphasis to the work of Rawls, Scanlon, Nussbaum, and Jürgen Habermas’s theory of communicative action, modernity, and discourse ethics.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2632.

Religion 1538. Liberal and Liberation Theologies in Dialogue
Catalog Number: 33612
Daniel P. McKanan (Divinity School)
Half course (spring term). F., 9:30–12. EXAM GROUP: 2, 3, 4
This course will explore the possibilities for fruitful interchange between classic liberal theologies and contemporary theologies of liberation. We will begin with major texts of American liberal theology (Channing, Emerson, Bushnell, Rauschenbusch), then turn to the defining liberationist texts (Gutierrez, Cone, Daly), and conclude with several attempts to integrate the traditions.

Note: Offered jointly with the Divinity School as 2415.

[Religion 1544. Unitarian and Universalist Thought in the Nineteenth Century]
Catalog Number: 38993
Daniel P. McKanan (Divinity School)
Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8
This seminar will explore the intellectual shapers of the Unitarian and Universalist traditions in the nineteenth century, with special attention to the founders and formative theologians of each tradition, the challenges of Transcendentalism and Spiritualism, and the interactions of Unitarianism and Universalism with broader currents of religious liberalism in the United States.

**Note:** Expected to be given in 2014–15. Offered jointly with the Divinity School as 2770.

**Religion 1550. Religion and American Public Life**  
Catalog Number: 1431  
*Mara Willard (Divinity School)*  
*Half course (fall term). W., 2-4, and an hour to be arranged.*  
An overview of the issues that arise within American democracy concerning the public role of religion. This course will cover issues in public theology, religion and democratic political theory, and constitutional law, including church/state relations. It will conclude with a case study in public policy, considering such issues as religion and gay/lesbian marriage, religion and welfare, and/or religion and welfare policy.  
**Note:** Offered jointly with the Divinity School as 2524.

**Religion 1557. Unitarian and Universalist History in the United States**  
Catalog Number: 85134  
*Daniel P. McKanan (Divinity School)*  
*Half course (fall term). W., 1–4.*  
This survey course will trace the history of both Unitarianism and Universalism from their eighteenth-century origins to the present. Focusing especially on the experiences of local congregations, we will explore the diverse starting points of liberal religion in the United States; the challenges of Transcendentalism, spiritualism, and humanism; the interplay between liberal religion and social reform; and the experience of consolidation in the twentieth century.  
**Note:** Offered jointly with the Divinity School as 2776.

[**Religion 1559. Unitarian and Universalist Thought in the Twentieth Century**](#)  
Catalog Number: 39813  
*Daniel P. McKanan (Divinity School)*  
*Half course (fall term). F., 9:30–12. EXAM GROUP: 2, 3, 4*  
This seminar will explore the major shapers of the Unitarian and Universalist traditions in the twentieth century, with special attention to the influence of the social gospel, religious humanism, process thought, and liberation theology. Featured writers will include Francis Greenwood Peabody, Clarence Skinner, John Jaynes Holmes, Charlotte Perkins Gilman, Curtis Reese, Frederick May Eliot, James Luther Adams, Sophia Fahs, Henry Nelson Wieman, Charles Hartshorne, A. Powell Davies, Kenneth Patton, William R. Jones, and Rebecca Parker.  
**Note:** Expected to be given in 2013–14. Offered jointly with the Divinity School as 2772.

**Religion 1562. Alternative Spiritualities in the United States**  
Catalog Number: 54285  
*Daniel P. McKanan (Divinity School)*  
*Half course (spring term). M., W., at 9. EXAM GROUP: 2*  
This course surveys spiritual practices and movements that have been labeled as "metaphysical," "esoteric," "occult," "harmonial," or "New Age." Beginning with colonial practices of astrology,
Alchemy, and spirit possession, we will consider Swedenborgianism, Spiritualism, Theosophy, New Thought, and their myriad descendants in the twentieth and twenty-first centuries. *Note:* The course will also feature field trips to two or three spiritual communities. Offered jointly with the Divinity School as 2360.

**[Religion 1565. Religion and the Left in US History]**  
Catalog Number: 70027  
Daniel P. McKanan (Divinity School)  
*Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
This course surveys religious and spiritual movements for social transformation in the United States from the early nineteenth century to the present. We will consider such movements as abolitionism, pacifism, feminism, socialism, the social gospel, and civil rights, paying special attention to the theological and denominational diversity of religious activism, external and internal criticisms of religious leftists, and the interplay between religious radicalism and other religious and cultural traditions.  
*Note:* Expected to be given in 2014–15. Offered jointly with the Divinity School as 2773.

**[Religion 1568. Religion, Ethics and Human Rights: Seminar]**  
Catalog Number: 7428  
Enrollment: Limited to 15.  
Instructor to be determined  
*Half course (spring term). Tu., 12–2. EXAM GROUP: 14, 15*  
The course will look at the ethical and religious bases of human rights discourse and examine the challenges to the universal claims inherent in that discourse. The course will explore a series of case studies on human rights issues worldwide in order to relate philosophical and religious concepts to actual human rights struggles.  
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 2805.

**Religion 1572. Sex, Gender and Sexuality**  
Catalog Number: 6407  
Amy Hollywood (Divinity School)  
*Half course (spring term). Tu., 2–4 and hour to be arranged. EXAM GROUP: 16, 17*  
The course will explore the theoretical articulation of sex, gender, and sexuality in twentieth-century medicine, social science, psychoanalysis, philosophy, and feminist and queer theory. Attention will be given to the ramifications of these concepts for the study of religion. Readings will include texts by Sigmund Freud, Simone de Beauvoir, Jacques Lacan, Michel Foucault, Gayle Rubin, Julia Kristeva, Monique Wittig, Judith Butler, Moira Gatens and others.  
*Note:* Offered jointly with the Divinity School as 2692.

**[Religion 1580. Religion and Identity in Modern American History, 1865-2000 - (New Course)]**  
Catalog Number: 81696  
Enrollment: Limited to 15.  
K. Healan Gaston (Divinity School)  
*Half course (fall term). W., 4–6. EXAM GROUP: 9*  
This course explores religion’s role in the formation and perpetuation of individual and group identities by asking how various axes of identity (such as race, gender, class, ethnicity,
nationality, age, and ability) speak to the experiences of religious leaders and ordinary believers.  
*Note:* Offered jointly with the Divinity School 2316.

**Religion 1585. Readings in Postmodern Theology - (New Course)**  
Catalog Number: 10359  
Mayra Rivera Rivera (Divinity School)  
*Half course (spring term). W., 1–4. EXAM GROUP: 6, 7, 8*  
Postmodernity has provoked critical examinations of basic concepts of modern Western thought, such as the self, history, language, truth, ontology, and coloniality, among others. This intellectual development has influenced theological studies. This course will engage recent philosophical and theological texts that explore the implications of these debates for theology as a discipline and a genre.  
*Note:* Offered jointly with the Divinity School as 2478.

Catalog Number: 74695  
Ann D. Braude (Divinity School)  
*Half course (spring term). Hours to be arranged.*  
Based around a series of traditionalist guest speakers, this course interrogates the study of religion in general and of Native American traditions in particular in light of indigenous religious experiences, perspectives and histories. Questions of appropriation, repatriation and religious freedom will be approached through legal as well as cultural frameworks.  
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 2345.

**Cross-listed Courses**

[African and African American Studies 180x. Race, Class and the Making of American Religion]  
[Anthropology 1125. The Moche of Ancient Peru: Politics, Economy, Religion and Art]  
[Anthropology 1158. Maya Narratives: Gods, Lords, and Courts]  
**Culture and Belief 52 (formerly History 1213). The American Evangelical Tradition from Jonathan Edwards to Jerry Falwell**  
**History 1155. Early Modern Europe, 1450-1789 - (New Course)**  
[*History 1325 (formerly *History 83f). Political Theology: Conference Course]*  
[History 1326. The Frankfurt School and Religion: Conference Course]  
[History 1350. Theories of Secularization: Conference Course]  
**History 1445. Science and Religion in American Public Culture**  
**Literature 113 (formerly Humanities 16). Existential Fictions: From Saint Augustine to Jean-Paul Sartre and Beyond**

**Primarily for Graduates**

[*Religion 2501. The Religious History of American Women: Seminar*  
Catalog Number: 6508  
Ann D. Braude (Divinity School)  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*
The Religious History of American Women: Seminar Ann D. Braude
Description: Takes the numerical dominance of women in most religious groups as the point of departure for an exploration of American history focusing on the interrelation of gender systems and religious world views. Topics include witchcraft, African American women evangelists, ideologies of domesticity, and the relation of gender to religious dissent, among others. The course emphasizes historical research methodology using gender as a category of analysis.

Note: Offered jointly with the Divinity School as 2325.
Prerequisite: Previous work in American religious history or women’s studies.

[Religion 2530. Kant and Enthusiasm]
Catalog Number: 69646 Enrollment: Limited to 15.
Amy Hollywood (Divinity School)
Half course (spring term). M., 4–6. EXAM GROUP: 9

The Course will explore the interplay of critique and enthusiasm in Kant’s writings, from the pre-critical writings through religion within the boundaries of mere reason.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2616.

[Religion 2542 (formerly Religion 1541). Kant: Seminar]
Catalog Number: 5295 Enrollment: Limited to 12.
David Lamberth (Divinity School)
Half course (fall term). Hours to be arranged.

A close reading of major works of Kant relevant to theology and philosophy of religion. The seminar focuses on issues such as the nature and limits of reason, the concepts of freedom, morality and faith, and the idea of God.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2674.
Prerequisite: Advanced work in theology or philosophy of religion.

[Religion 2550. Women and Religion in Contemporary America: Seminar]
Catalog Number: 8927
Ann D. Braude (Divinity School)
Half course (fall term). Hours to be arranged.

Surveys contemporary developments in Christian, Jewish, and Muslim communities. Topics include religion and women’s political mobilization, including evangelical and Mormon movements; the modernization of orthodoxies, including Judaism and Catholicism; and the body as a site of conflict, exploration, and expression of the intersecting categories of religion, gender, and American identity. The course approaches persistent issues of modesty, dress, sexuality, food, menstruation, healing, and ordination.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2328.

[*Religion 2555. Readings in Twentieth and Twenty-first Century Theory]
Catalog Number: 66638 Enrollment: Limited to 12.
Amy Hollywood (Divinity School)
Half course (spring term). M., 4–7 p.m. EXAM GROUP: 9

Readings will vary each year. 2012-13 Topic: Freud.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 2759.
**Religion 2565. Religions in North America: An Introduction to the History of Interpretations - (New Course)**
Catalog Number: 70085 Enrollment: Limited to 15.
David D. Hall (Divinity School)
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
From Alexis de Tocqueville onward, historians, sociologists, religionists, and anthropologists have vigorously debated how to understand the history of religions in North America. This course provides an introduction to major moments in the ongoing process of interpretation. 
*Note:* Offered jointly with the Divinity School as 2306.

**Cross-listed Courses**

[Anthropology 2062. Religions of Latin America]
[Anthropology 2085. Archaeology of Ritual and Religion]

**Graduate Courses of Reading and Research**

*Religion 3505hfr. Colloquium in American Religious History*
Catalog Number: 6445 Enrollment: Limited to 20.
David Neil Hempton (Divinity School) 5974
Half course (throughout the year). Tu., 7 p.m. - 9 p.m., bi-weekly.
Presentation and discussion of the research of doctoral candidates in American religious history. 
*Note:* Open, with instructor’s permission, to doctoral students in other fields of religious studies or American studies. Offered jointly with the Divinity School as 2390.

**Hinduism and South Asia**

**Primarily for Undergraduates**

**Cross-listed Courses**

[Aesthetic and Interpretive Understanding 30 (formerly Literature and Arts A-92). Love In A Dead Language: Classical Indian Literature and Its Theorists]
[Culture and Belief 28. Hindu Worlds of Art and Culture]
[*History 86e. Nation, Reason and Religion in South Asia]

**For Undergraduates and Graduates**

**Religion 1600. Introduction to the Hindu Traditions of India**
Catalog Number: 9700
Anne E. Monius (Divinity School)
Half course (fall term). M., W., at 10, and hour to be arranged. EXAM GROUP: 3
An introduction to the many distinct yet interrelated religious traditions of South Asia that are often labeled "Hinduism." This course considers the ways in which Hindus from a variety of historical time periods, local traditions, and social backgrounds have attempted to make sense of
their world and their lives within it.

*Note: Offered jointly with the Divinity School as 3404.*

**Religion 1627. Hindu Ethics: Seminar**
Catalog Number: 9638 Enrollment: Limited to 15.
Anne E. Monius (Divinity School)
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
An intensive exploration of the place of ethics and moral reasoning in Hindu thought and practice. Materials to be examined will be drawn from a wide range of sources, from classical Sanskrit *dharmasastra*, epic narrative, devotional poetry, and modern ethnography, but emphasis will be placed throughout upon the particularity of different Hindu visions of the ideal human life.

*Note: Offered jointly with the Divinity School as 3923.*

**Religion 1636. Hinduism Through the Modern Novel**
Catalog Number: 5069
Anne E. Monius (Divinity School)
Half course (spring term). M., W., at 10, and hour to be arranged. EXAM GROUP: 3
Although not a literary genre indigenous to India, the novel has rapidly emerged as one of the most creative and powerful means of modern Hindu literary expression in India and abroad. This course will explore what it means to be "Hindu" in the colonial and post-colonial age through the lens of contemporary fiction.

*Note: Offered jointly with the Divinity School as 3411.*

**Religion 1655. Gandhi, Then and Now: Seminar**
Catalog Number: 91335 Enrollment: Limited to 15.
Diana L. Eck
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Readings in the life, religious thought, and social activism of M.K. Gandhi, considering Gandhi in his own time and historical context as well as his connections to those who took inspiration from his approach to issues of non-violent change and social justice. We will consider biographies and studies of Gandhi, his own autobiographical writings, his writings on non-violence, self-reliance, religion, and social transformation.

*Note: Offered jointly with the Divinity School as 3421. Application required and available on course website.*

**Religion 1661 (Spiritual Exercises: The Yoga Sutras in a Comparative Perspective). Yoga Sutras in a Comparative Perspective**
Catalog Number: 8002 Enrollment: Limited to 15.
Francis X. Clooney (Divinity School)
Half course (spring term). W., 2–4:30. EXAM GROUP: 7, 8
This seminar is for students interested in the study of primary Indian/Hindu texts, read in translation and in the context of a comparative dynamic of reading across the boundaries of traditions. The Yoga Sutras and their commentaries will be read along with excerpts from Christian parallels (e.g., the Spiritual Exercises of Ignatius Loyola).

*Note: Offered jointly with the Divinity School as 3931.*
Prerequisite: No language or course prerequisites, but students who know Sanskrit will be encouraged to make use of their expertise. It is not necessary to have taken prior courses in this series.

Cross-listed Courses

South Asian Studies 124 (formerly Indian Studies 124). Introduction to World Mythology
*South Asian Studies 150. Workshop on Pilgrimage: The Kumbha Mela - (New Course)

Primarily for Graduates

Cross-listed Courses

Sanskrit 200br (formerly Sanskrit 212br). Advanced Literary Sanskrit
[Sanskrit 201br. Advanced Philosophical Sanskrit]

Buddhism

Primarily for Undergraduates

Cross-listed Courses

Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture
Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
*Freshman Seminar 32x. Topics in Indo-Tibetan Buddhism

For Undergraduates and Graduates

[Religion 1701. Introduction to Buddhist Scriptures and Their Critical Interpretations]
Catalog Number: 5996 Enrollment: Limited to 30.
Charles Hallisey (Divinity School)
Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
An introduction to basic issues in the contemporary understanding of textuality, history, and interpretation and their relevance to the study of Buddhist scriptures. Examples of Buddhist scriptures will be drawn primarily from the Mahayana traditions.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3836.

[Religion 1705 (Buddhism in Tibet). Tibetan Buddhism]
Catalog Number: 7192
Janet Gyatso (Divinity School)
Half course (fall term). Tu., Th., 11:30-1, and an hour to be arranged.
Distinctive traditions of Tibetan Buddhism in their historical contexts. Topics include: the ethics of compassion, visionary meditations; tantric yoga and physiologies; death and reincarnation practices; magic and state rituals; the creation of sacred landscape; religious authority and discipline; and cultures of writing, learning and painting. Throughout the course we will consider
the relation of these religious practices to the historical development of Tibetan cultures, Buddhist institutions, and state formations.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3563.

[Religion 1707. Introduction to Buddhist Commentaries and their Critical Interpretations]
Catalog Number: 9290 Enrollment: Limited to 30.
Charles Hallisey (Divinity School)
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
An introduction to the study of Buddhist commentaries, their textual and hermeneutic services, as well as their history and their places in Buddhist scholastic cultures. Examples of Buddhist commentaries will be drawn from across the Buddhist world.

Note: Expected to be given in 2013–14. Expected to be given in 2013-14. Offered jointly with the Divinity School as 3779.

Religion 1709. Introduction to Buddhist Scriptural Anthologies and their Critical Interpretations - (New Course)
Catalog Number: 34998 Enrollment: Limited to 30.
Charles Hallisey (Divinity School)
Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
An introduction to basic issues in reading Buddhist Scriptural Anthologies, both historical and hermeneutic. Special emphasis will be given to issues of intertextuality that the formation of scriptural anthologies generates. Examples of Buddhist scriptural anthologies will be drawn from across the Buddhist world.

Note: Offered jointly with the Divinity School as 3800.

Religion 1720. Moral Anthropology: Buddhist Insights
Catalog Number: 1582 Enrollment: Limited to 25.
Charles Hallisey (Divinity School)
Half course (fall term). Tu., 4–6. EXAM GROUP: 18
An exploration of the contribution of Buddhist resources to critical reflection on moral anthropology. Buddhist materials will be drawn from the Theravadin and Jodo Shinshu traditions.

Note: Offered jointly with the Divinity School as HDS 3837.

[Religion 1722. Buddhist Ethics]
Catalog Number: 38661 Enrollment: Limited to 25.
Charles Hallisey (Divinity School)
Half course (fall term). Tu., 4–6. EXAM GROUP: 18
A systematic exploration of Buddhist views of moral anthropology and the place of moral reflection in Buddhist thought and practice. The scope of the course is wide, with examples drawn from the whole Buddhist world, but the emphasis will be given to the particularity of different Buddhist visions of human flourishing. Attention will also be given to the challenges and promises of describing Buddhist ethics in a comparative perspective.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3576.
Religion 1730 (Buddhist Women and Representations of the Female). Buddhist Women and Gender Theory
Catalog Number: 4463
Janet Gyatso (Divinity School)
Half course (spring term). Tu., Th., 11:30–1 and hour to be arranged. EXAM GROUP: 13, 14
This course explores gender conception and the place of women in Buddhist monastic discipline, in lay life, and in tantric sexual traditions. Our sources include Buddhist and contemporary Western and Asian gender theory, Buddhist narrative, and autobiographies by Buddhist women. The course takes up feminist criticism of Buddhism, historical Buddhist efforts to promote gender equality, and contemporary debates on whether feminist criticism is a modern or western imposition.
Note: Offered jointly with the Divinity School as 3559.
Prerequisite: No previous study of Buddhism required.

Religion 1735. The Body and its Moral Cultivation: Buddhist Sources - (New Course)
Catalog Number: 25633 Enrollment: Limited to 17.
Janet Gyatso (Divinity School)
Half course (fall term). Th., 4–6. EXAM GROUP: 18
This seminar studies and compares monastic, scholastic, medical, and tantric sources on anatomy and physiology. It then considers how paths of training deploy these maps of the body to effect change in the body’s experience, the mind’s capacity, and the ethical dimensions of interpersonal relations. This includes a close look at monastic discipline, and various traditions of meditation, bodily exercise, and bodily kinds of worship and devotion.
Note: Offered jointly with the Divinity School as 3570.

[Religion 1741. Modern Buddhism and Fiction]
Catalog Number: 23554 Enrollment: Limited to 25.
Charles Hallisey (Divinity School)
Half course (fall term). W., 4–6. EXAM GROUP: 9
An examination of how fiction is a vehicle for religious reflection in the modern Buddhist world. The genres of fiction will include both the novel and the short story, with examples drawn widely from across the Buddhist world.
Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3777.

Religion 1742. Introduction to Buddhist Narrative and Story Literature
Catalog Number: 90183 Enrollment: Limited to 30.
Charles Hallisey (Divinity School)
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
An introduction to the study of narrative and story literature in the Buddhist world. A primary focus will be on the narrative and story literature found in Buddhist scriptures and commentaries, but there will also be consideration of examples of narrative and story literature that circulated independently. Examples will be drawn from across the Buddhist world.
Note: Offered jointly with the Divinity School as 3776.

Cross-listed Courses
Primarily for Graduates

Cross-listed Courses

East Asian Buddhist Studies 240r. Japanese Buddhist Doctrine and Monastic Culture: Seminar

[East Asian Buddhist Studies 245r (formerly East Asian Buddhist Studies 245). Ritual and Text in Japanese Buddhist Literature]

[East Asian Buddhist Studies 255. Readings on Chinese Religions: Recent Scholarship on Chinese Buddhism: Seminar]

East Asian Buddhist Studies 256r (formerly East Asian Buddhist Studies 256). Chinese Buddhist Texts--Readings in Medieval Buddho-Daoist Documents: Seminar

Tibetan 219r. Tibetan Religious Literature: Seminar

Islam

Primarily for Undergraduates

Cross-listed Courses

[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]

Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies

[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]

Societies of the World 46 (formerly Anthropology 1621). The Anthropology of Arabia

For Undergraduates and Graduates

[Religion 1802. Introduction to Islamic Mysticism: The Sufi Tradition]

Catalog Number: 3830

Ali S. Asani

Half course (spring term). Hours to be arranged.

Introductory survey of Sufism, focusing on its fundamental concepts, ritual practices, institutions, and its impact on literary and sociopolitical life in different Muslim societies.

Note: Expected to be given in 2013–14. Offered jointly with the Divinity School as 3620. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts C, but not both.

Prerequisite: An introductory course in Islam or equivalent helpful but not essential.
[*Religion 1816. Ismaili History and Thought*]
Catalog Number: 18808 Enrollment: Limited to 15.
Ali S. Asani
Half course (spring term). Hours to be arranged.
A seminar surveying the development and evolution of Ismaili interpretations of Islam in various historical and cultural settings.
*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 3939.
*Prerequisite:* Prior study of Islam or permission by instructor required.

[*Religion 1820 (formerly *Religion 1585). Muslim Societies in South Asia: Religion, Culture, and Identity*]
Catalog Number: 2741
Ali S. Asani
Half course (spring term). Hours to be arranged.
South Asia is home to the largest concentration of Muslims in the world. This course surveys the development of Muslim communities in the region focusing on an exploration of their identities in diverse contexts. Issues and themes will be considered within religious and socio-political contexts, as well as the broader framework of South Asian cultures as expressed in language, literature, and the arts. The course also examines various ways in which the terms "Islamic" and "Muslim" are understood in pre-modern and modern discourses as well as the lived experiences of being Muslim in contemporary India, Pakistan, and Bangladesh.
*Note:* Expected to be given in 2013–14. Offered jointly with Divinity School as 3625. This course, when taken for a letter grade, meets the General Education requirement for either Culture and Belief or Societies of the World, but not both. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.
*Prerequisite:* Introductory course in Islam or equivalent.

**Religion 1832. Political Islam in the 20th and 21st Centuries**
Catalog Number: 43973
Malika Zeghal
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course reviews the literature produced by social scientists and historians on the origins, ideologies, and political practices of 20th century Islamist movements as well as on their evolution in the early 21st century.
*Note:* Offered jointly with the Divinity School as 3361.

**Religion 1840. Private, Public and Islam – (New Course)**
Catalog Number: 92378
M. Shahab Ahmed
Half course (spring term). Tu., 5:30–7:30 p.m. EXAM GROUP: 18
This course examines the concepts and categories of ‘public’ and ‘private’ in Islamic history. How have Muslims conceptualized ‘public’ and ‘private,’ and what has been the place and effect of these categories in the construction, organization and operation of social, legal, cultural and discursive norms in terms of Islam?
*Note:* Not open to auditors. Offered jointly with Divinity School as 3982.
Prerequisite: Religion 1806 (Vocabulary of Islam) or equivalent course from another institution, or approval of instructor.

Religion 1860. The Word(s) of the Prophet: Prophetic Traditions through History - (New Course)
Catalog Number: 83483 Enrollment: Section Meeting will be Friday, 12-1.
Ahmed Ragab (Divinity School)
Half course (spring term). W., 4–6 and a weekly hour to be arranged. EXAM GROUP: 9
The Prophetic traditions in Islam constitute a large body of literature, which includes sayings attributed to Muhammad, actions taken by him, actions, which he approved or rejected and intimations that he produced among other things. This body developed through Islamic history and represented one of the most important sources of legitimacy, legal reasoning, socio-cultural fashioning, as well as social and political disagreement. In addition to different legal and devotional utterances, the body of prophetic traditions included ethical statements, scientific and medical prescriptions (such as prophetic medicine), historical narratives and political statements. These different traditions acquired different lives and histories in different societies. Moreover, the science of Hadith, which is a discipline dedicated to verifying different prophetic traditions, became one of the most significant and influential cultural and scientific practices from the medieval era till today. This course follows the development of the body of prophetic traditions and how it developed across time. We will analyze a number of themes in the body of prophetic traditions and see the role these traditions played in the construction of different legal views and different aspects of Muslim ortho/heterodoxies.

Note: Offered jointly with the Divinity School as 3367.

Cross-listed Courses

History 1877a (formerly History 1877). History of the Near East, 600–1055
History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
[History of Science 111. Two Scientific Revolutions: From the Classical Age of Islamic Sciences to the Scientific World of Early Modern Europe]
History of Science 113. Crusades, Plagues and Hospitals: Medicine and Society in the Islamic Middle Ages
[Islamic Civilizations 103. Orientalism: Old and New Perspectives]
Islamic Civilizations 145. Introduction to Islamic Philosophy and Theology
[Islamic Civilizations 180. Contemporary Islam: Texts and Contexts]
[Islamic Civilizations 183. Reform and Revival in Modern Islam, 19th -20th centuries]
Islamic Civilizations 185. Ulama, Religious Institutions, and Islamic Education in the Middle East
[The Modern Middle East 105 (formerly Near Eastern Civilizations 105). Peoples and Societies of the Middle East] - (New Course)
The Modern Middle East 120. The Arab Revolutions: popular uprisings and political transformations - (New Course)
The Modern Middle East 170 (formerly Arabic 170). Introduction to the Arab World II: Politics, Religion, and Culture from World War I to Present

Primarily for Graduates
Cross-listed Courses

[*Comparative Literature 211. Mysticism and Literature: Seminar]  
*History of Science 209. Science, Religion and Culture: Debates, Methods and Controversies  
*Islamic Civilizations 221. Does the Fiqh Know a Concept of Natural Law? - *(New Course)*  
*Islamic Civilizations 223. The Islamic Ritual’s Influence on the Legal Reasoning of the Fiqh - *(New Course)*  
*Islamic Civilizations 241r. Approaches to Studying Indo-Muslim Culture and South Asian Islam  
*The Modern Middle East 220. The Spring of 2011 in the Middle East - *(New Course)*

African and Afro-Atlantic Religions

For Undergraduates and Graduates

Cross-listed Courses

[African and African American Studies 104. Witchcraft, Rituals and Colonialism]  
[African and African American Studies 104x. Gender and Sexuality in Black Atlantic Religions]  
*African and African American Studies 104v. Transnational Feminisms*  
[African and African American Studies 104z. Voodooizations and the Politics of Representation]  
*African and African American Studies 160. Christianity, Identity, and Civil Society in Africa*  
*African and African American Studies 187. African Religions*  
[African and African American Studies 192x. Religion and Society in Nigeria]  
*Anthropology 1667. Africa, Modernity and Ethnography: Seminar*

Primarily for Graduates

Cross-listed Courses

[African and African American Studies 214. Ethnography of the African Diaspora: Race, Gender and Power]

Chinese and Japanese Religions

Primarily for Undergraduates

Cross-listed Courses
Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture
[Culture and Belief 33. Introduction to the Study of East Asian Religions]
Ethical Reasoning 18 (formerly Moral Reasoning 78). Classical Chinese Ethical and Political Theory
[Societies of the World 12 (formerly Historical Study A-13). China: Traditions and Transformations]
Societies of the World 13 (formerly Historical Study A-14). Japan in Asia and the World

For Undergraduates and Graduates

Cross-listed Courses

East Asian Studies 140. Major Religious Texts of East Asia
[Japanese History 115. Religion and Society in Edo and Meiji Japan]
[Japanese History 120. Religion and Society in Twentieth-Century Japan]
Japanese History 126. Shinto: Conference Course

Primarily for Graduates

Cross-listed Courses

[Chinese History 255. Popular Religion in Late Imperial China: Historiography]
East Asian Buddhist Studies 240r. Japanese Buddhist Doctrine and Monastic Culture: Seminar
[East Asian Buddhist Studies 245r (formerly East Asian Buddhist Studies 245). Ritual and Text in Japanese Buddhist Literature]
[East Asian Buddhist Studies 255. Readings on Chinese Religions: Recent Scholarship on Chinese Buddhism: Seminar]
East Asian Buddhist Studies 256r (formerly East Asian Buddhist Studies 256). Chinese Buddhist Texts--Readings in Medieval Buddho-Daoist Documents: Seminar
*East Asian Film and Media Studies 203 (formerly Japanese History 257). Animated Spirituality: Japanese Religion in Anime, Manga, and Film (Graduate Seminar in General Education) - (New Course)

Graduate Courses of Reading and Research

*Religion 3000. Direction of Doctoral Dissertations
Catalog Number: 1933
Ryuichi Abe 4974, M. Shahab Ahmed 5273, Ali S. Asani 7739, Janet Browne 5511 (on leave 2012-13), David L. Carrasco 4213 (on leave spring term), Francis X. Clooney (Divinity School) 1785, Diana L. Eck 4514, Francis Fiorenza (Divinity School) 2735, Marla F. Frederick 4728 (on leave 2012-13), Luis M. Giròn Negrón 3060, William Albert Graham 4156 (on leave 2012-13), Janet Gyatso (Divinity School) 4243, David D. Hall (Divinity School) 2510, Helen
2012-2013 Previous Courses of Instruction

Hardacre 3191, David Neil Hempton (Divinity School) 5974, Albert Henrichs 4085 (on leave spring term), Evelyn Brooks Higginbotham 3517, Amy Hollywood (Divinity School) 5547, Beverly M. Kienzle (Divinity School) 2452, Karen L. King (Divinity School) 4217, Arthur Kleinman 7473 (on leave spring term), James T. Kloppenber 3157 (on leave 2012-13), David Lamberth (Divinity School) 3714, Jon D. Levenson (Divinity School) 2264, Peter Machinist 2812, Kevin J. Madigan (Divinity School) 4287, Everett I. Mendelsohn 2700, Anne E. Monius (Divinity School) 4489, Roy Mottahedeh 1454 (on leave spring term), Laura S. Nasrallah (Divinity School) 4834, Jacob Olupona 5608, Parimal G. Patil 4478, Kimberly C. Patton (Divinity School) 3306, Michael J. Puett 1227, Elisabeth Schüssler Fiorenza (Divinity School) 3193, P. Oktor Skjaervo 2869 (on leave spring term), Charles Stang (Divinity School) 6204, Ronald Thiemann (Divinity School) 3395 (fall term only), Jonathan Lee Walton (Divinity School) 6462, Malika Zeghal 6744, and Leonard W. J. van der Kuijp 1556

Note: May also be taken with other instructors, when authorized by the Chair.

*Religion 3001. Reading and Research
Catalog Number: 7954
Ryuichi Abe 4974, M. Shahab Ahmed 5273, Ali S. Asani 7739, Giovanni Battista Bazzana (Divinity School) 6873, Janet Browne 5511 (on leave 2012-13), David L. Carrasco 4213 (on leave spring term), Francis X. Clooney (Divinity School) 1785, Nancy F. Cott 4261 (on leave 2012-13), Harvey G. Cox, Jr. (Divinity School) 3479, Diana L. Eck 4514, Francis Fiorenza (Divinity School) 2735, Marla F. Frederick 4728 (on leave 2012-13), Luis M. Girón Negrón 3060, William Albert Graham 4156 (on leave 2012-13), Janet Gyetso (Divinity School) 4243, David D. Hall (Divinity School) 2510, Charles Hallisey (Divinity School) 3032, Helen Hardacre 3191, Jay M. Harris 2266, David Neil Hempton (Divinity School) 5974, Evelyn Brooks Higginbotham 3517, Amy Hollywood (Divinity School) 5547, Beverly M. Kienzle (Divinity School) 2452, Karen L. King (Divinity School) 4217, Arthur Kleinman 7473 (on leave spring term), James T. Kloppenber 3157 (on leave 2012-13), Helmut H. Koester (Divinity School) 3477, David Lamberth (Divinity School) 3714, Jon D. Levenson (Divinity School) 2264, Peter Machinist 2812, Kevin J. Madigan (Divinity School) 4287, Daniel P. McKanan (Divinity School) 6387, Everett I. Mendelsohn 2700, David G. Mitten 1290, Anne E. Monius (Divinity School) 4489, Roy Mottahedeh 1454 (on leave spring term), Laura S. Nasrallah (Divinity School) 4834, Jacob Olupona 5608, Parimal G. Patil 4478, Kimberly C. Patton (Divinity School) 3306, Stephanie A. Paulsell (Divinity School) 5382, Michael J. Puett 1227, Elisabeth Schüssler Fiorenza (Divinity School) 3193, Charles Stang (Divinity School) 6204, D. Andrew Teeter (Divinity School) 6111 (spring term only), Ronald Thiemann (Divinity School) 3395 (fall term only), Jonathan Lee Walton (Divinity School) 6462, Malika Zeghal 6744, and Leonard W. J. van der Kuijp 1556

Note: May also be taken with other instructors, when authorized by the Chair.

*Religion 3002. Foreign Language Certification
Catalog Number: 4791
Members of the Committee
Reading and research conducted in a specific foreign language, normally French or German, to satisfy the modern language reading proficiency requirement for PhD students in the Study of Religion.
Note: Limited to PhD candidates who receive written permission from the Committee’s Director of PhD Studies.

Romance Languages and Literatures

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Romance Languages and Literatures

Virginie Greene, Professor of Romance Languages and Literatures, Harvard College Professor (Chair)
Daniel Aguirre Oteiza, Lecturer on Romance Languages and Literatures
Matthew Battles, Visiting Lecturer on Romance Languages and Literatures
Janet Beizer, Professor of Romance Languages and Literatures (on leave spring term)
Carole Bergin, Preceptor in Romance Languages and Literatures
Emmanuel Bouju, Visiting Professor of Romance Languages and Literatures
Kahlil Chaar-Pérez, College Fellow in the Department of Romance Languages and Literatures
Joaquim-Francisco Coelho, Nancy Clark Smith Professor of the Language and Literature of Portugal and Professor of Comparative Literature (on leave 2012-13)
Tom Conley, Abbott Lawrence Lowell Professor of Romance Languages and Literatures and of Visual and Environmental Studies
Verena A. Conley, Visiting Professor of Comparative Literature and of Romance Languages and Literatures (fall term only)
Sergio Delgado, Assistant Professor of Romance Languages and Literatures (on leave 2012-13)
Elvira G. DiFabio, Senior Preceptor in Romance Languages and Literatures
Bradley S. Epps, Professor of Romance Languages and Literatures and of Studies of Women, Gender, and Sexuality (on leave 2012-13)
Francesco Erspamer, Professor of Romance Languages and Literatures
Luis Fernández-Cifuentes, Robert S. and Ilse Friend Professor of Romance Languages and Literatures, Harvard College Professor (Director of Graduate Studies)
Mary M. Gaylord, Sosland Family Professor of Romance Languages and Literatures
Luis M. Girón Negrón, Professor of Romance Languages and Literatures and of Comparative Literature (Director of Undergraduate Studies and Undergraduate Adviser for Romance Studies)
Adriana Gutiérrez, Senior Preceptor in Romance Languages and Literatures
Sylvaine Guyot, Assistant Professor of Romance Languages and Literatures (on leave 2012-13)
Alice Jardine, Professor of Romance Languages and Literatures and of Studies of Women, Gender, and Sexuality
Clémence Jouët-Pastré, Senior Preceptor in Romance Languages and Literatures (Associate Director of Undergraduate Studies and Undergraduate Adviser in Portuguese-Brazilian Studies)
Stacey Katz Bourns, Senior Lecturer on Romance Languages and Literatures (Director of Language Programs and Undergraduate Adviser in French)
Johanna Damgaard Liander, Senior Preceptor in Romance Languages and Literatures (Undergraduate Adviser in Spanish)
Maria Grazia Lolla, Lecturer on Romance Languages and Literatures
Andreea Marculescu, College Fellow in the Department of Romance Languages and Literatures and ACLS New Faculty Fellow
Christie McDonald, Smith Professor of French Language and Literature and of Comparative Literature
Eric Mechoulan, Visiting Professor of Romance Languages and Literatures
Nicole Mills, Senior Preceptor in Romance Languages and Literatures
Giuliana Minghelli, Associate Professor of Romance Languages and Literatures (Undergraduate Adviser in Italian)
Maria Luisa Parra-Velasco, Senior Preceptor in Romance Languages and Literatures
José Rabasa, Visiting Professor of Romance Languages and Literatures (fall term)
Beatriz Sarlo, Robert F. Kennedy Visiting Professor of Latin American Studies
Jeffrey Schnapp, Professor of Romance Languages and Literatures (on leave spring term)
Nicolau Sevcenko, Professor of Romance Languages and Literatures
Mariano Siskind, Assistant Professor of Romance Languages and Literatures
Doris Sommer, Ira Jewell Williams, Jr. Professor of Romance Languages and Literatures and of African and African American Studies (Undergraduate Adviser in Latin American Studies)
Diana Sorensen, James F. Rothenberg Professor of Romance Languages and Literatures and of Comparative Literature, Dean of Arts and Humanities
Susan R. Suleiman, C. Douglas Dillon Professor of the Civilization of France and Professor of Comparative Literature (on leave fall term)

Other Faculty Offering Instruction in the Department of Romance Languages and Literatures

Diana Sorensen, James F. Rothenberg Professor of Romance Languages and Literatures, Dean of Arts and Humanities

Franco Fido, Carl A. Pescosolido Professor of Romance Languages and Literatures, Emeritus
Francisco Márquez Villanueva, Arthur Kingsley Porter Professor of Romance Languages and Literatures, Emeritus
Francois Proulx, Lecturer on Literature

Romance Languages and Literatures offers courses in Catalan, French, Italian, Portuguese, and Spanish, as well as in Latin American Studies, and Romance Studies. Courses appear below under these headings. Letters A-D and numbers 30-99 indicate courses designed primarily for undergraduates. Courses numbered 100-199 are open to both undergraduates and graduate students. 200-level courses are intended primarily for graduate students and, exceptionally, to advanced undergraduates.

Course groupings reflect both progression in level of language study and diversity of thematic focus.

GROUP I: Courses focused on language acquisition. Courses A-D offer beginning and early
intermediate instruction in language. Courses 20-59 give special attention to the development of language skills in a variety of literary and cultural contexts. Courses number 59 combine language study and engagement with living language communities in the Boston area.

GROUP II: Courses designed to introduce students to systematic study of literature and culture. Courses 60-69 offer effective bridges between the studies of language, culture, and literature. Courses 70-79 introduce major works and currents of literary history as preparation for 100-level literature courses. Courses 80-99 include specialized undergraduate seminars, tutorials, and independent study. Courses numbered 60-99 require approximately the same level of language proficiency.

GROUP III: Advanced courses in literature and culture. Numbers 100-199 reflect period, regional, and thematic groupings. All courses in this group assume the same degree of language proficiency.

GROUP IV: 200-299 Graduate courses, chiefly seminars.

Additionally, department faculty offer courses (some of which are cross-listed below) in General Education, the Freshman Seminar program, the Department of Literature and Comparative Literature, Visual and Environmental Studies, and in Studies of Women, Gender, and Sexuality, among others. For further offerings in general and comparative Romance literatures, see listings of the Department of Literature and Comparative Literature.

Students interested in earning a foreign language citation in a Romance language should read carefully the sections on Catalan, French, Italian, Portuguese, and Spanish in the description of "Citations in Foreign Language" in the Academic Performance section of the FAS Student Handbook. In general, language courses C and above can count toward a citation if they are taken in sequence and if they meet the criteria set forth in the Student Handbook. Literature courses taught in the target language can normally be taken for citation credit, but students should consult with the Director of Language Programs in Romance Languages and Literatures for exact information.

Several members of the Romance Languages and Literatures faculty offer intensive courses through the Harvard Summer Abroad Program. These courses count for Harvard undergraduate degree credit, and may count for Romance Languages and Literatures concentration credit. For more information please see http://www.fas.harvard.edu/~rll/undergraduate/study—abroad.html.

No language courses may be taken Pass/Fail. Graduate students in the Faculty of Arts and Sciences may take language courses (numbered A-54) for a grade of Sat/Unsat, with permission of the course head. All Romance language courses, 100-level and above, may be taken Pass/Fail without course head’s signature unless otherwise noted. Undergraduates are free to enroll in 200-level graduate courses only with permission of the course head. No auditors are allowed in lettered language courses or in courses numbered 30 to 69. No one may enter A level courses after the eighth meeting of the class, Acd, Bab, or Dab classes after the first meeting, or C or 30 level courses after the sixth meeting.
Catalan

Primarily for Undergraduates

**Catalan Ba. Introduction to Catalan**
Catalog Number: 2153  
*Stacey Katz Bourns and members of the Department*  
*Half course (fall term). Tu., Th., 3–5. EXAM GROUP: 17, 18*

An introductory course in spoken and written Catalan, the language of approximately ten million people in Spain, France, Italy, and Andorra, and the most widely used of minoritized languages in Europe today. Native Catalan speakers include Antonio Gaudí, Salvador Dalí, Joan Miró, Antoni Tàpies, Mercè Rodoreda, and Pau Casals. Emphasizing oral communication, reading, and writing, offers students contact with contemporary Catalan culture.  
*Note:* Conducted in Catalan. Knowledge of another Romance language is useful but not essential. Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students.

**Catalan 20. Catalan Language and Culture: a Multimedia Approach**
Catalog Number: 2559  
*Stacey Katz Bourns and members of the Department*  
*Half course (spring term). Tu., Th., 3–4:30. EXAM GROUP: 17, 18*

Intermediate course introducing students to Catalan culture and boosting their oral and written skills through a wide range of resources, such as Internet, television, radio, and press. Students will get a taste of various aspects of Catalan culture: art, cinema, music, literature, traditions, cuisine, history, and more.  
*Note:* Conducted in Catalan. Not open to auditors. May not be taken Pass/Fail by undergraduates, but may be taken Sat/Unsat by GSAS students.  
*Prerequisite:* Catalan Ba, basic knowledge of Catalan, or permission of course head.

**Catalan 91r. Supervised Reading and Research**
Catalog Number: 2578  
*Stacey Katz Bourns and members of the Department*  
*Half course (fall term; repeated spring term). Hours to be arranged.*

Tutorial supervision of research on subjects not treated in regular courses. May be used for further language study after Catalan Ba or 20.

French

All students with some previous French in secondary school are required to take the placement test if they have not taken the SAT II, AP, or IB examinations in French. The term “placement score” or “placement test” hereafter refers to the French placement test given during Freshman Week for freshmen, and usually on the day preceding Registration Day for returning students.

Students who receive a grade of 5 in the College Board Advanced Placement Examinations in French Literature or Language are admitted directly into French courses numbered in the 40s, 50s, and 60s or 70a, 70b, or 70c, with permission of course head, and also into 100-level courses.
of French literature with permission of course head. For details of Advanced Placement see the pamphlet *Advanced Standing at Harvard College* or contact the Director of the Program of Advanced Standing.

**Primarily for Undergraduates**

**French Aa. Beginning French I**
Catalog Number: 12968  
Nicole Mills and members of the Department  
Half course (fall term; repeated spring term). Fall: M. through Th., sections at 9, 10, 11, 12, or 1. Spring: M. through Th., sections at 10 or 1.  
This elementary French course provides an introduction to French with emphasis on interpersonal communication and the interpretation and production of language in written and oral forms. Students engage in interactive communicative activities, both online and in the classroom, that provide rich exposure to the French and francophone language and culture. The course addresses the theme of identity through engagement in the discussion and interpretation of various French and francophone texts, images, films, and songs.  
*Note:* French Aa is an elementary French course for students with little or no knowledge of French. French Aa may count toward the language requirement. Open to students who have not previously studied French or who have scored below 300 on the Harvard placement exam. Students who have studied French for two years or more in secondary school must begin at French Ab or higher. May not be taken Pass/Fail. Not open to auditors. Graduate students at GSAS may take the course Sat/Unsat with permission of course head. Section on-line on the French Aa iSite.

**French Ab. Beginning French II**
Catalog Number: 28075  
Nicole Mills and members of the Department  
Half course (fall term; repeated spring term). Fall: M. through Th., sections at 10 or 1. Spring: M. through Th., sections at 9, 10, 11, 12, or 1.  
As the second course in the Elementary French sequence, students will engage in an online simulation of life in Paris while exploring Parisian cultural identity through the interpretation and analysis of French texts, images, film, paintings, articles, and songs. Students will actively engage in oral and written communication in the past, present, and future and learn to make suggestions, express emotions, express opinions, extend invitations, give advice, and express hypothetical situations.  
*Note:* French Ab may count towards the language requirement. May not be taken Pass/Fail. Not open to auditors. Graduate students at the GSAS may take the course Sat/Unsat with the permission of course head. Section on-line on the French Ab iSite.  
*Prerequisite:* Completion of French Aa, or a score no lower than 301 and no higher than 450 on the SAT II test or the Harvard Placement test.

**French Acd. Intensive Beginning French: Special Course**
Catalog Number: 8780  
Nicole Mills and members of the Department  
Full course (fall term; repeated spring term). M. through F., at 10 and Tu., Th., at 11.
This intensive Beginning French course provides an accelerated introduction to Beginning French with intensive work on interpersonal communication and interpreting and producing language in written and oral forms. Students explore diverse facets of Parisian identity through the interpretation of various texts, films, and images. Students learn to speak and write in the past, present, and future, make descriptions, ask questions, make comparisons, accept and refuse invitations, give advice, and express hypothetical situations, emotions, and opinions.

**Note:** May not be used to fulfill the language requirement and may not be taken Pass/Fail or Sat/Unsat. Not open to auditors. Students must participate in an individual interview with the French Acd course head and receive permission to enroll in the course. The on-line request form is available on the French Acd iSite and must be submitted by August 27, 2012 (Fall Term) and December 10, 2012 (Spring Term).

**Prerequisite:** An advanced knowledge of at least one foreign language but no previous study of French.

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**[French Ax. Reading Modern French]**

Catalog Number: 2763

*Stacey Katz Bourns and members of the Department*

*Half course (fall term). Hours to be arranged.*

An introduction to reading and translating modern French texts for students who require only a basic knowledge of French for research purposes. French Ax presents the principle structures of French grammar in a systematic and coherent manner and, at the same time, makes reading and translation assignments as discipline-specific as possible for each student’s needs.

**Note:** Expected to be given in 2013–14. Conducted in English. Not open to students with a score of 500 or above on the Harvard Placement Test or the SAT II French test, to those with more than one year of undergraduate French, or to auditors. May not be used to fulfill the language requirement and may not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. See details and section on-line on the French Ax website.

**Prerequisite:** Some previous study of a Romance language helpful but not necessary. Fluency in English required.

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**French C. Intermediate French**

Catalog Number: 58289

*Carole Bergin and members of the Department*

*Half course (fall term; repeated spring term). Fall: M. through Th., sections at 9, 10, 11, 12, or 1; Spring: M. through Th., sections at 9 or 11.*

In this intermediate level language course, students will study and discuss issues faced in contemporary France and other francophone countries. Students will interpret French and francophone culture through a variety of texts, films, and multimedia resources, while participating in a range of oral and written communicative activities. Students will also review and refine their knowledge of various grammatical structures.

**Note:** Conducted in French. May count toward the language requirement. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the French C website.

**Prerequisite:** A score no lower than 451 and no higher than 600 on the SAT II test or the Harvard Placement Test; 3 years of French in high school; French A, Ab, Acd, or Bab; or permission of course head.
French 30. Advanced Language Review
Catalog Number: 36981
Carole Bergin and members of the Department
Half course (fall term; repeated spring term). Section I: Tu., Th., 10-11:30; Section II: Tu., Th., 11:30-1.
An advanced language course focusing on current events in France and other francophone countries as they are represented in various types of media. Students will engage in discussions and interactive written and oral activities around these current events, while using the necessary discourse strategies, vocabulary and idiomatic expressions. Through analyzing and interpreting the topics presented by the media, students will also reflect on the issues of perspective, objectivity and freedom of expression in all media.
Note: Conducted in French. May not be audited or taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. See details and section on-line on the French 30 website.
Prerequisite: A score no lower than 601 and no higher than 680 on the SAT II test or the Harvard Placement test; French C, Ca, Cb; or 25; or permission of course head

French 40. Upper-level French I: Language and Culture
Catalog Number: 74519
Stacey Katz Bourns and members of the Department
Half course (fall term; repeated spring term). M., W., F., sections at 10 or 12.
An advanced French language and culture course designed to enhance all language skills (reading, writing, listening and speaking). Using various types of texts (including, but not limited to, French films), students gain insights into French culture, improve their grammar, and build their vocabulary.
Note: Conducted in French. May not be taken Pass/Fail but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the French 40 website.
Prerequisite: French 30, 681-720 on the SAT II test or the Harvard Placement test; or permission of course head.

French 50. Upper-level French II: Language and Culture
Catalog Number: 22997
Stacey Katz Bourns and members of the Department
Half course (fall term; repeated spring term). M., W., F., at 10 or 12.
A continuation of French 40. This course builds on the reading, writing, listening, and speaking skills acquired in French 40, with a particular emphasis on honing students’ writing. The course also contains a strong grammar component, focusing on stylistic differences between French and English, prescriptive rules of French grammar, and various genres and registers of spoken and written language.
Note: Conducted in French. Students may take no more than two courses numbered in the 50s. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the French 50 website.
Prerequisite: French 40; a score of 721-750 on the SAT II test or the Harvard Placement test; or permission of course head.

French 55. Business French
Catalog Number: 7122
Carole Bergin and members of the Department
Half course (spring term). Section I, Tu., Th., 10-11:30; Section II, Tu., Th., 11:30-1.
Using articles and multimedia resources that focus on the current business and economic climate in France, students will interpret practices, customs, and "intangibles" in the French business world. Students will also work on improving their communication skills, often in a simulated professional environment. Interactive oral and written activities are used to prepare students to work or travel for business in French-speaking countries. Those enrolled may take the Paris Chamber of Commerce and Industry exams and obtain an official diploma attesting to their proficiency in French.
Note: Conducted in French. May not be audited or taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Students may take no more than two courses numbered in the 50s. See details and section on-line on the French 55 website.
Prerequisite: A score of 721-750 on the SAT II test or the Harvard Placement test; French 40 or 50; or permission of course head.

*French 59. French and the Community
Catalog Number: 13398
Carole Bergin
An advanced French language course, where students will explore Haitian culture in the classroom and in the community. In class students will work on interactive oral and written activities using a variety of texts and media. In the community, through teaching French to Haitian-American children in community organizations within the Greater Boston area, students will develop their oral communication skills and acquire first-hand insights into Haitian culture. Introduces students to some methods for teaching a foreign language.
Note: Interested students must apply in writing no later than August 28, 2012 to Carole Bergin. More information can be found on the French 59 website. Students may take no more than two courses numbered in the 50s.
Prerequisite: French 40 or 50; a placement score of 721-750 on the SAT II test or the Harvard Placement test; or permission of course head.

[*French 61a. Classicism and Modernity: An Introduction to Performance*]
Catalog Number: 8290 Enrollment: Limited to 15.
Sylvaine Guyot
Half course (fall term). Hours to be arranged.
Is classical theater the "other" of modern drama? What links our expectations as spectators today to the heroes, plots, and audience of the past? We focus on famous French playwrights of both the 17th (Molière, Corneille, Racine) and the 20th-21st centuries (Sartre, Badiou, Largarce, N’Diaye) to consider the relationships between modernity and classicism. Special emphasis paid to the ideological power of images through theatrical workshops. The final project consists of an excerpt to be performed.
Note: Expected to be given in 2013–14. Conducted entirely in French. May not be taken for credit by students who have previously taken French 48b. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Interested students are required to apply in writing to Professor Guyot no later than the first day of the Fall term of 2013. Students may take no more than two courses at the 60-level in French.
Prerequisite: French 50 or another French course at the 50 level; 751-780 on the SAT II or the Harvard placement test; or permission of course head.

*French 61c. The New Wave: Reinventing French Cinema - (New Course)*
Catalog Number: 81858
Stacey Katz Bourns and members of the Department
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
In this introductory course about the Nouvelle Vague, students gain a unique perspective on French society, culture, and film in the 1950s and 1960s by studying the works of Jean-Luc Godard, François Truffaut, Éric Rohmer, Jacques Rivette, and Claude Chabrol (among others). Students develop their writing and reading skills through film analysis and hone their speaking ability and listening comprehension through film screenings, examination of dialogue, and class discussions.
Note: Conducted entirely in French. Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Students may take no more than two courses at the 60-level (not including French 60).
Prerequisite: French 50 or another French course at the 50-level; 751-780 on the SAT II or the Harvard placement test; or permission of the course head.

*French 61h. Being French: Historical and Societal Considerations*
Catalog Number: 89626
Stacey Katz Bourns and members of the Department
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
This course examines the concept of a "French identity" from the principles of the Enlightenment to the contemporary debates and political controversies about national identity. Through the exploration of historical, literary, sociological and philosophical texts, as well as film and multimedia resources, we will focus on individuals, symbolic places, ideological discourses and narratives that have contributed to the formation and questioning of a French national identity.
Note: Conducted entirely in French. Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Students may take no more than two courses at the 60-level in French.
Prerequisite: French 50 or another French course at the 50 level; 751-780 on the SAT II or the Harvard placement test; or permission of course head.

*French 61m. Modern Stories about Paris*
Catalog Number: 0575
Stacey Katz Bourns
Half course (spring term). Tu., Th., 11:30–1; Tu., Th., 11:30–1.
This course examines contemporary narratives set in Paris. Students explore writers’ and filmmakers’ perceptions of Paris and analyze the different ways in which the Parisian experience is presented. By reading and viewing stories about Paris, students gain insights into methods of narration and integrate various techniques into their own writing and speaking. They also develop a sophisticated understanding of how the French language is evolving, especially in its spoken form.
Note: Conducted in French. Not open to auditors. May not be taken Pass/Fail. Students may take no more than two courses at the 60 level (not including French 60). Not open to students who
have already taken French 51.

**Prerequisite:** French 50 or another French course at the 50 level; 751-780 on the SAT II or the Harvard placement test; or permission of course head.

**French 70a. Introduction to French Literature I: From the Middle Ages to Modernity**
Catalog Number: 2865

*Tom Conley*

*Half course (spring term). M., W., at 11, and an additional weekly section hour to be arranged. EXAM GROUP: 4*

Readings and discussion of texts of various genres representative of central trends in French literature from the Middle Ages through the 18th century. Emphasis on developing analytical skills by tracing the transformations of ethical, literary, philosophical and social currents.

**Note:** Conducted in French. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Prerequisite:** A 50- or 60-level course in French; a score above 780 on the SAT II test or the Harvard Placement test; equivalent preparation; or permission of course head.

**French 70b. Introduction to French Literature II. 19th and 20th Centuries: Moving and Shaking**
Catalog Number: 6720

*Janet Beizer*

*Half course (fall term). Tu., Th., at 11, and an additional weekly section hour to be arranged. EXAM GROUP: 13*

Texts from the nineteenth and twentieth centuries examined in the light of close reading and analysis, with a focus on the significant role played by mobility in the modern world: the wanderer, the émigré, the exile, the hysterical, the itinerant actress, in addition to more socially acceptable travelers: explorers and bourgeois tourists. We discuss the evolution, fragmentation, and reinvention of literary forms to correspond to a rapidly modernizing world.

**Note:** Conducted in French; third hour devoted to discussion of texts studied. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Prerequisite:** A 50- or 60-level course in French; a score above 780 on the SAT II test or the Harvard Placement test; equivalent preparation, or permission of course head.

**French 70c. Introduction to French Literature III: The Francophone World**
Catalog Number: 6432

*Mylène Priam*

*Half course (fall term). W., 1-3, and an additional weekly section hour to be arranged. EXAM GROUP: 6, 7*

Studies literature and film from sub-Saharan Africa, the Maghreb, the Caribbean, Québec, Vietnam, and Afghanistan. Discussions centered on questions of cultural identity, language, postcoloniality, diaspora, trauma and memory.

**Note:** Conducted in French. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

**Prerequisite:** A 50- or 60-level course in French; a score above 780 on the SAT II test or the Harvard Placement test, equivalent preparation, or permission of course head.
**French 90m. Performing Madness in French Literature - (New Course)**
Catalog Number: 70622
Andreea Marculescu
Half course (spring term). M., W., at 12, and an additional weekly section hour to be arranged.
EXAM GROUP: 5
What criteria determined that a subject is "mad", "depressed", "neurotic", "hysterical"? We will analyze why and how mad persons were portrayed in a series of literary texts written between the 12th and the 20th century in French literature. We will discuss various aspects connected to madness taking into account the fact that madness changes historically and is central to the formation of identities of self.
Note: Conducted in French.
**Prerequisite:** A previous course in French at the 60- or 70-level, 800 on the SAT II or the Harvard placement test, or permission of course head.

**French 90t. Writing and Re-Writing French Theater - (New Course)**
Catalog Number: 40408
Andreea Marculescu
Half course (fall term). Tu., Th., at 10., and an additional weekly section hour to be arranged.
EXAM GROUP: 12
This class examines the intellectual, political, and social roles that theater played in French society from the 13th century to the current day. Studies treatises on the nature of theater and acting as well as testimonials, manifestos, archival material, plays written by Adam de la Halle, Molière, Corneille, Beaumarchais, Jarry, Anouilh, Ionesco, Aimé Césaire and Mnouchkine.
Note: Conducted in French.
**Prerequisite:** A previous course in French at the 60- or 70-level, 800 on the SAT II or the Harvard placement test, or permission of course head.

*French 91r. Supervised Reading and Research*
Catalog Number: 3954
Stacey Katz Bourns and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research on subjects not treated in regular courses.
Note: Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in French for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some coursework in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

*French 97. Tutorial—Sophomore Year: The Politics of Poetics: An Introduction to Literary and Cultural Analysis*
Catalog Number: 0173
Alice Jardine
Half course (spring term). Tu., Th., at 10.
An introduction to literary and cultural interpretation as it has evolved in French Studies since World War II. Our conversations will be structured around rigorous analysis of key literary works in relation to literary theory, semiotics, psychoanalysis, and politics.
Note: Required of concentrators in French and Francophone Studies in their sophomore year. May also be taken as the Sophomore Tutorial by concentrators in Romance Studies. Open to non-concentrators with permission of course head.

*French 98. Tutorial—Junior Year
Catalog Number: 0879
Stacey Katz Bourns and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Weekly individual instruction for juniors pursuing a thesis honors track in French and Francophone Studies, culminating in the writing of a 20-25 page research paper in French. Note: Successful completion of one term of French 98 or equivalent is required of all thesis-track honors concentrators in French and Francophone Studies.

*French 99. Tutorial—Senior Year
Catalog Number: 2836
Stacey Katz Bourns and members of the Department
Full course. Hours to be arranged.
Weekly individual instruction for students writing a senior thesis. Note: For honors seniors writing a thesis. Successful completion of two terms of French 99 is required of all thesis-track honors concentrators. Students who do not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit. Prerequisite: Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

Cross-listed Courses

Aesthetic and Interpretive Understanding 25 (formerly Literature and Arts C-55).
Surrealism: Avant-Garde Art and Politics between the Wars
*Freshman Seminar 31o. Negotiating Identity in Postcolonial Francophone Africa and the Caribbean

For Undergraduates and Graduates

Open to students with 800 on the Harvard Placement Test or SAT II, a score of 5 on the Advanced Placement Test in language or literature, previous coursework at Harvard of an appropriate level, or by permission of course head
French 102. Introduction to Medieval Literature and Old French
Catalog Number: 9929
Virginie Greene
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Provides students with literary and cultural means of exploring French medieval literature. We will study verse and prose works from the 12th to the 15th century, using editions in Old French and translations in modern French. Note: Conducted in French. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.
French 117. Witches’ Narratives in Medieval and Early-Modern French Literature - (New Course)
Catalog Number: 55515
Andreea Marculescu
Half course (fall term). W., 3-5, and an additional weekly section hour to be arranged. EXAM GROUP: 8, 9
In medieval and early-modern Europe, witches were objects of torture, marginalization, subjugation, and mass destruction. This class explores how the female witch emerged as an object of knowledge, investigation, control, and agency in literature and theological thought. We will study literary texts (Merlin, Roman de la Rose, Mélusine, Champion des dames, Médée), excerpts from witchcraft treatises, and contemporary critical thought (Foucault, Michel de Certeau, Adriana Cavarero).
Note: Conducted in French.

French 136. A La Française: French Feminisms Today
Catalog Number: 3845
Alice Jardine
Half course (fall term). Tu., Th., at 12; EXAM GROUP: 14
Close readings of postwar French fiction and theory with emphasis on what is called “the feminine” in key psychoanalytic, philosophical, and literary writings of the French poststructuralist tradition. In particular, we will focus on fifty years of dialogue between postwar theory in France and feminist practice in the United States. Writers considered include Cixous, Duras, Hyvrard, Irigaray, Kristeva, and Wittig as well as Deleuze, Derrida, and Lacan.
Prerequisite: Excellent reading knowledge of French.

[*French 148b. Mettre en scène les classiques. Monter L’Illusion comique*]
Catalog Number: 81511 Enrollment: Limited to 12.
Sylvaine Guyot
Half course (spring term). Hours to be arranged.
This course focuses on the preparation of a student-led production of L’Illusion comique, a French play of the 17th century, and concludes with a performance in French at the end of the semester. To react to the challenges we will face in staging L’Illusion comique, we will examine the diversity of performance theories and practices in the 17th century through the close readings of a given set of plays (Racine, Molière, Rotrou, Tristan l’Hermitte), as well as the main trends in the contemporary staging of classical plays, through video versions of recent performances.
Note: Expected to be given in 2013–14. Conducted entirely in French. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.
Prerequisite: French 48b; French 61a; or permission of instructor

[French 157. The Hermaphroditic Imagination]
Catalog Number: 1338
Janet Beizer
Half course (spring term). Hours to be arranged.
While official scientific and social positions in the nineteenth century uphold rigid distinctions between women and men, the imaginary life of the period is haunted by the hermaphrodite and other figures that play on the margins of sexual division, challenging the separation of the
spheres. We’ll read and discuss hermaphroditic fictions chosen from Balzac, George Sand, Gautier, Flaubert, Zola, and Rachilde.

*Note:* Expected to be given in 2014–15. Conducted in French.

**French 165. Marcel Proust**  
Catalog Number: 4620 Enrollment: Limited to 20.  
Christie McDonald and Francois Proulx  
Half course (spring term). W., 1-3, and an additional weekly section hour to be arranged. EXAM GROUP: 6, 7

In Proust’s novel, *A la recherche du temps perdu*, questions of time and memory, truth and signification, literature and philosophy converge to ask: who am I? What does it mean to become a writer? Readings include selections from each tome of the novel and significant critical texts. Offered in conjunction with the interdisciplinary conference "Proust and the Arts" (April 2013). Students will attend related exhibits and performances, and may submit a creative final project.  

*Note:* The language of class discussion (French or English) will be determined. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.  

**Prerequisite:** An excellent reading knowledge of French.

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**[French 177. Poetic Revolutions] - (New Course)**  
Catalog Number: 31502  
Verena A. Conley  
Half course (spring term). Hours to be arranged.

Focuses on major poets of the 19th-21st centuries (Hugo, Nerval, Baudelaire, Rimbaud, Mallarmé, Apollinaire, Char, Michaux, Glissant, Cixous, Deguy and others) whose revolutionary aesthetics bear on ethics and politics.  

*Note:* Expected to be given in 2013–14. Conducted in French.

**French 188. They Write in French from Egypt, Lebanon, and the Maghreb: Feminine Voices**  
Catalog Number: 60203  
Mylène Priam  
Half course (spring term). Th., 1–3; W., at 8. EXAM GROUP: 15, 16

Explores the multifaceted and polyphonic presence on the literary landscape of French expression, of women writers from North Africa, Egypt, Lebanon, and Iran, whose writings are a continued dialogue between feminist and gender theory, western feminine literature, the defense of the cultural particularities of their regions, and transnationalism. Works by Assia Djebar, Leïla Sebbar, Malika Mokkedem, Nadia Chafik, Vénus Khoury-Ghata, Andrée Chedid, Nawal el Saadawi, Evelyne Accad, Chahdortt Djavann.  

*Note:* Conducted in French.

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**French 191. L’extrême contemporain: 21st Century French Fiction - (New Course)**  
Catalog Number: 98131  
Emmanuel Bouju  
Half course (fall term). Tu., 3–5. EXAM GROUP: 17, 18

Ce séminaire explorera les possibilités du roman français “à-présent” (W. Benjamin), confronté aux problématiques de “l’extrême contemporain” et de “l’hypermodernisme”. Les lectures
porteront sur une série de textes fictionnels et autobiographiques très récents, qui seront examinés et discutés à la fois pour eux-mêmes, au regard de la tradition littéraire française et européenne à laquelle ils appartiennent, en fonction des questions théoriques qui les soutendent. 

*Note:* Conducted in French.

**Cross-listed Courses**

[*Literature 104. On Theory]*

**Literature 113 (formerly Humanities 16). Existential Fictions: From Saint Augustine to Jean-Paul Sartre and Beyond**

**Literature 129. Reading the 18th Century Through 21st-Century Eves**

[*Literature 146 (formerly *Literature 124). Space and Place in Postmodern Culture]*


[Literature 165. The Holocaust and Problems of Representation ]

[Literature 173. The Politics of Aesthetics]

**Visual and Environmental Studies 183. Cinema and the Auteur - (New Course)**

[Visual and Environmental Studies 192 (formerly Foreign Cultures 21). Cinema and French Culture from 1896 to the Present ]

[Visual and Environmental Studies 196. Women’s Film and Video in France: Agnès Varda, Chantal Akerman and Claire Denis]

**Primarily for Graduates**

**French 213. In Search of a Medieval Subject**

Catalog Number: 0952

Virginie Greene

Half course (fall term). M., 1–3. EXAM GROUP: 6, 7

We will read various medieval authors ranging from Augustine to Christine de Pizan to identify a medieval subjectivity. Modern texts on subjectivity will be used as a counterpoint.

*Note:* Conducted in French. Open to qualified undergraduates with permission of the instructor.

**French 230. Revenge and Friendship in Early Modern France - (New Course)**

Catalog Number: 46609

Éric Méchoulan

Half course (spring term). Tu., 3–5:30. EXAM GROUP: 17, 18

Examines the question of revenge and friendship as political emotions and social bonds, studying fiction (from Corneille to Scudéry) and non-fiction (from Montaigne to Spinoza), with a special attention to the history of sentiment.

*Note:* Conducted in French.

**French 259. The Culture of Hysteria: From Nineteenth-Century France to Here and Now**

Catalog Number: 3349

Janet Beizer

Half course (fall term). Th., 3–5. EXAM GROUP: 17, 18

As we read nineteenth-century medical, literary, and cultural texts with contemporary analogues, we ask why hysteria flourished in that time and place, and now this one, and trace the diagnosis
as symptom of a broader cultural malaise.

*Note: Conducted in English. Most readings in French.

**French 268. "Foreigners" in French, from Beckett to Littell**
Catalog Number: 65916
Susan R. Suleiman

*Half course (spring term). Hours to be arranged.*
Examines fiction and non-fiction by emigrant writers who have chosen French as their literary language. Special attention to themes of memory, history, and foreignness. Works by Beckett, Némirovsky, Sarraute, Kundera, Kristeva, Semprun, Sijie, others.

*Note: Expected to be given in 2013–14.*

**French 270. War and Memory: Representations of World War II and the Occupation in Postwar French Literature, History, and Film**
Catalog Number: 59011
Susan R. Suleiman

*Half course (spring term). W., 3–5. EXAM GROUP: 8, 9*
France was the only country in Western Europe that both "lost" and "won" World War II. We explore individual and collective consequences of that split. Works by Sartre, Céline, Simon, Duras, Modiano, Ophuls and others.

*Note: Conducted in French and English; good reading knowledge of French essential.*

**French 271. Legacies of Post-structuralism: Politics, Ethics and Aesthetics**
Catalog Number: 8448
Verena A. Conley

*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*
Focuses on French philosophers and theorists who re-evaluate post-structuralism (Deleuze, Derrida, Foucault) through the prism of contemporary dilemmas such as democracy, community, citizenship, subjectivity, exclusion and trauma. Texts by Nancy, Rancière, Balibar, and Malabou will be paired with works of fiction and film where applicable.

*Note: Language of class discussion (French or English) to be determined.*

**French 295. Theorizing the Francophone Caribbean - (New Course)**
Catalog Number: 22596
Mylène Priam

*Half course (spring term). Th., 3–5. EXAM GROUP: 17, 18*
Discusses leading intellectuals and writers’ representations of the region through key literary theories and concepts, and innovative approaches to culture and identity. Examines critical approaches (i.e. ecocriticism) to rethink the Caribbean in our global world.

*Note: Conducted in French.*

**Cross-listed Courses**

[*Comparative Literature 257. Trauma, Memory, and Creativity]*
*Visual and Environmental Studies 270. Proseminar in Film and Visual Studies: History*
*Visual and Environmental Studies 271. Proseminar in Film and Visual Studies: Theory*
**Graduate Courses of Reading and Research**

Advanced graduate students reading in the field of a proposed doctoral dissertation or working in a field of specific interest not covered by courses may propose individual projects of reading and research to be undertaken under the direction of individual members of the Department.

*French 320. French Literature: Supervised Reading and Research*
Catalog Number: 1798
Janet Beizer 3957 (on leave spring term), Tom Conley 1908, Verena A. Conley 2250, Virginie Greene 1007, Sylvaine Guyot 6320 (on leave 2012-13), Alice Jardine 7457, Christie McDonald 1160, Mylène Priam 5302, and Susan R. Suleiman 7234 (on leave fall term)

*French 330. Direction of Doctoral Dissertations*
Catalog Number: 7843
Janet Beizer 3957 (on leave spring term), Tom Conley 1908, Verena A. Conley 2250, Virginie Greene 1007, Sylvaine Guyot 6320 (on leave 2012-13), Alice Jardine 7457, Christie McDonald 1160, Mylène Priam 5302, and Susan R. Suleiman 7234 (on leave fall term)

**Italian**

All students with some previous Italian in secondary school are required to take the placement test if they have not taken the SAT II, AP, or IB examinations in Italian. The term "placement score" or "placement test" hereafter refers to the Italian placement test given during Freshman Week for freshmen, and usually on the day preceding Registration Day for returning students.

Students who receive a grade of 5 in the College Board Advanced Placement Examinations in Italian are admitted directly into Italian courses numbered in the 30s or higher, with permission of the course head. For details of Advanced Placement see the pamphlet Advanced Standing at Harvard College or contact the Director of the Program of Advanced Standing.

**Primarily for Undergraduates**

*Italian Aa. Beginning Italian I*
Catalog Number: 4309
Elvira G. DiFabio and members of the Department
Half course (fall term; repeated spring term). Fall: M. through Th., sections at 9, 10, 12, 1, or M., W., at 11 and Tu., Th., at 10. Spring: M. through Th., at 10 or 12.
For students with little or no knowledge of Italian. Aims at achieving basic communication skills and vocabulary. Emphasis on oral expression and listening comprehension. The cultural component examines everyday life in comparative perspective. Course materials include workbook, audio-lab, and video.
Note: Conducted in Italian. Students whose placement score does not entitle them to enter a more advanced course are assigned to Italian Aa. May not be taken Pass/Fail but may be taken Sat/Unsat by GSAS students. Section on-line on the Italian Aa website. Not open to auditors.
**Italian Ab. Beginning Italian II**
Catalog Number: 7029
Elvira G. DiFabio and members of the Department

Half course (fall term; repeated spring term). Fall: M. through Th., at 10. Spring: M. through Th., sections at 9, 10, or 12.

Continuation of Italian Aa, second semester beginning level. Increasing emphasis on reading and writing. The cultural component presents capsules on the history of Italy from the founding of Rome to Italy today, through select readings and a feature-length film. Course materials include workbook, audio-lab and video.

*Note:* May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Section on-line on the Italian Ab website. Not open to auditors.

*Prerequisite:* Italian Aa, or a score of 450 or less on the SAT II test or the Harvard Placement test, or a score of 3 or less on the AP Italian exam, or two years of high school Italian, or permission of course head.

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**Italian Acd. Intensive Beginning Italian: Special Course**
Catalog Number: 3065 Enrollment: Limited to 15.
Elvira G. DiFabio and members of the Department

Full course (fall term; repeated spring term). M., W., F., at 10, and Tu., Th., 10-11:30.

A complete first-year course in one term for students with no knowledge of Italian, focused on developing all four communicative skills. Students are introduced to contemporary Italian culture through a variety of websites, films and cultural readings that present capsules on the history of Italy from the founding of Rome to Italy today.

*Note:* May not be taken Pass/Fail but may be taken Sat/Unsat by GSAS students. Students who have not placed out of the language requirement must take one full year of a language. Italian Acd taken alone may not be used to fulfill the language requirement. However, there are ways to combine Italian Acd with another course in order to fulfill the language requirement. Consult Dr. Elvira Di Fabio or the Undergraduate Adviser in Italian for details. Conducted in Italian. Section on-line on the Italian Acd website. Not open to auditors.

*Prerequisite:* An advanced knowledge of at least one foreign language, preferably a modern Romance language, but no previous study of Italian.

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**[Italian Ax. Reading Italian]**

Catalog Number: 4015
Elvira G. DiFabio and members of the Department

Half course (spring term). Hours to be arranged.

For students (both undergraduate and graduate) with little or no knowledge of Italian. Aims at the rapid development of reading skills as a tool for research. Selections of materials in accordance with the needs of the participants.

*Note:* Expected to be given in 2013–14. Not open to auditors. May not be used to fulfill the language requirement. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Section on-line on the Italian Ax website.

*Prerequisite:* Some previous study of a Romance language helpful but not necessary. Fluency in English required.
**Italian C. Intermediate Italian**  
Catalog Number: 29891  
*Elvira G. DiFabio and members of the Department*  
**Half course (fall term; repeated spring term). Fall: Section 1: M. through Th., at 12; Section 2: M., W., at 11 and Tu., Th., at 1. Spring: M., through Th., at 12.**  
Revisiting structures and building reading skills. A structured review of grammar, intertwined with an introduction to popular Italian literature from comics to romance to detective stories. Course materials include multi-media projects that build on language proficiency and cultural awareness.  
**Note:** Conducted in Italian. May count toward the language requirement. May not be taken by students who have previously taken Italian Ca, Cb or Dab. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Section on-line on the Italian C website. Not open to auditors.  
**Prerequisite:** A score of 451-600 on the SAT II test or the Harvard Placement test; Italian Ab, Acd, or Bab; or permission of course head.

**Italian 30. Upper-Level Italian**  
Catalog Number: 44998  
*Elvira G. DiFabio and members of the Department*  
**Half course (fall term; repeated spring term). Fall: Tu., W., Th., at 12 and a required weekly section W. 3:30-4:30. Spring: M. through Th., at 12.**  
Revisiting structures and refining speaking and writing skills through an arts interface. Students will work closely with the collection at the Harvard Art Museum for assignments that build on receptive and productive communicative skills. Course materials may include films, popular music, operatic libretti and literary texts. Consult course website for current semester topics.  
**Note:** Conducted in Italian. May not be taken by students who have previously taken Italian 35 or 36. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors.  
**Prerequisite:** Italian C, Ca, Cb, or Dab; a score of 601-680 on the SAT II test or the Harvard Placement test; or permission of course head.

**Italian 40. Advanced Oral Expression. Ciak, si parla!**  
Catalog Number: 0804  
*Elvira G. DiFabio and members of the Department*  
**Half course (fall term; repeated spring term). Tu., Th., 1–2:30.**  
Students develop oral expression and communication skills through the close reading of texts that are meant for performance, such as plays, film scripts, poetry, music. Variation in diction and presentation techniques culminates in the adaptation and production of one or more of these texts for a public performance at the end of the term. Consult course website for current semester topics.  
**Note:** Conducted in Italian. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Appropriate for concentrators electing the Italian Studies or Romance Studies track. Not open to auditors.  
**Prerequisite:** A score of 681-720 on the SAT II or the Harvard Placement Test; Italian 30, 35 or 36; equivalent preparation; or permission of course head.
**Italian 50.** Advanced Written Expression, *Italia scritta e descritta*
Catalog Number: 26649
Elvira G. DiFabio (fall term), Maria Grazia Lolla (spring term), and members of the Department
Half course (fall term; repeated spring term). Fall: Tu., Th., 11:30–1; Spring: Tu., Th., 1–2:30.
A theme-based course designed to develop advanced competence in written expression through guided examination of stylistics and pragmatics. The course includes readings from a variety of literary genres, films, workshops, and a series of guest lectures by our faculty on design, women and society, cinema, fiction, and other subjects. Consult the course website for current semester topics.
*Note:* Conducted in Italian. Appropriate for concentrators electing the Italian Studies or Romance Studies track. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors.
*Prerequisite:* A score between 721-750 on the SAT II or on the Harvard Placement Test; Italian 40; or permission of course head.

**Italian 91r.** Supervised Reading and Research
Catalog Number: 2287
Giuliana Minghelli and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research on subjects not treated in regular courses.
*Note:* Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in Italian for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course work in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

**Italian 96r.** Italian and the Community: Italy. Academic Internships in Italian Language and Culture: Special Course
Catalog Number: 3749
Elvira G. DiFabio and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
An opportunity to engage in the practical applications of Italian language and culture in an immersion environment. Internships may include placement in a variety of sectors, including public education, the media and the arts. Students must submit a written proposal to Dr. DiFabio by August 31, 2012 for Fall term enrollment and by January 23, 2013 for Spring term enrollment.
*Note:* Though academic internships may be arranged in the Greater Boston area, this course can be proposed as integral to a study abroad program in Italy, the details of which are to be coordinated in consultation with the course head and the Office of International Education. Students are expected to produce substantial research papers based on relevant class work and field placements. The student, under the guidance of faculty and study abroad advisers, is responsible for arranging the terms of the internship.
*Prerequisite:* Italian 50 or the consent of the course head.
*Italian 98. Tutorial—Junior Year
Catalog Number: 1167
Giuliana Minghelli and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Weekly individual instruction for juniors pursuing a thesis honors track in Italian Studies, culminating in the writing of a 20-25 page research paper in Italian.
Note: Successful completion of one term of Italian 98 (or equivalent) is required of all thesis-track honors concentrators in Italian Studies.

*Italian 99. Tutorial — Senior Year
Catalog Number: 7840
Giuliana Minghelli and members of the Department
Full course. Hours to be arranged.
Weekly individual instruction for students writing a senior thesis in Italian.
Note: For honors seniors writing a thesis. Successful completion of two terms of Italian 99 is required of all thesis-track honors concentrators. Students who do not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit.
Prerequisite: Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

Cross-listed Courses

*Freshman Seminar 31t. The Modern Image: Intersections of Photography, Cinema, and Italian Culture
For Undergraduates and Graduates

Italian 102 (formerly Italian 83). Italian Pop: Comics, Mass Media, Folk Culture
Catalog Number: 4259
Giuliana Minghelli
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Introduction to Italian popular culture through songs, TV shows, comics, popular films and fiction. We will discover and analyze competing inscriptions of "Italianness" and the ongoing creation of their meaning over the past half-century. We will read texts in the socio-historical context of the miracolo economico of the early sixties, the political upheaval of the late sixties and seventies, the riflusso of the eighties, the political glasnost of the nineties, up to contemporary times.
Note: Conducted in Italian. Appropriate for concentrators in the Italian Studies and Romance Studies tracks, as well as for students pursuing a secondary field in Italian.
Prerequisite: Italian 50; a score above 750 on the SAT II test or the Harvard Placement test; or permission of course head.

*Italian 104 (formerly Italian 44). Effetto Commedia: What Makes Italians Laugh?
Catalog Number: 5776
Elvira G. DiFabio
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Comedy Italian-style in cinema and its origins, from Totò to Benigni. Presents students with another dimension of Italian culture, while increasing communicative effectiveness. Presentational skills addressed through weekly written assignments and oral reports; grammar review in context. Weekly feature-length film.

*Note:* Conducted in Italian. Appropriate for concentrators in the Italian Studies and Romance Studies tracks, as well as for undergraduates pursuing a secondary field in Italian.

*Prerequisite:* Italian 50; or permission of course head.

**Italian 141. Renaissance Epic: War, Identity, Desire**
Catalog Number: 5328
Francesco Erspamer

*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*
We analyze the driving forces behind epic in the classic and medieval world—war, identity, and desire—and their transformation at the dawn of modernity. In order to prepare for the close reading of Torquato Tasso’s *Jerusalem Delivered*, we will study and discuss selected cantos from the *Iliad*, the *Odyssey*, the *Aeneid*, the *Chanson de Roland*, Dante’s *Divine Comedy*, Boiardo’s *Orlando innamorato* and Ariosto’s *Orlando Furioso*.

*Note:* Conducted in Italian.

**Italian 163. A Cinema for a Changing Earth: Memory, Materiality and Modernity in Michelangelo Antonioni - (New Course)**
Catalog Number: 52019
Giuliana Minghelli

*Half course (fall term). W., 2-4, and a required weekly film screening M., 5-8pm. EXAM GROUP: 7, 8*
The formal rigor of the films of Michelangelo Antonioni—their resistance to our understanding, their challenge to our ways of seeing and narrating—allows us to explore how cinema rethinks our modes of dwelling in the world. How do Antonioni’s films express and transform their contemporary moment—the trauma of Fascism; the Cold War; the boom of the 1960s; the postmodern? How do they speak to our present relations to memory, technology, and climate?

*Note:* Conducted in Italian or English, depending on class composition. Readings available in the original Italian or in English translation.

**Italian 175. Picturing Place: Landscape, Literature, and Cinema from the Eighteenth to the Twentieth Century**
Catalog Number: 76404
Giuliana Minghelli and Maria Grazia Lolla

*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*
Changing approaches to the experience, representation and interpretation of the Italian landscape from the eighteenth to the twentieth century through literary texts, visual arts, and film. Authors will include Foscolo, Leopardi, Manzoni, Pasolini, Visconti, Rossellini, Antonioni.

*Note:* Conducted in Italian or English, depending on class composition.

*Prerequisite:* Reading knowledge of Italian.

*[Italian 188. The Moment of the Monument Workshop. Case Study: The Monument to Victory in Bolzano (Marcello Piacentini, 1926-1928)] - (New Course)*
Catalog Number: 54724
Jeffrey Schnapp
Half course (fall term). Hours to be arranged.
A workshop concerned with how memory and place intersect the art of architecture. The point of intersection is the monument; and the monument summons of the specter of monumentality and a century-long debate regarding the place of monumentality in modern and contemporary culture and architectural practice.
Note: Expected to be given in 2013–14.

Cross-listed Courses

Linguistics 101. The Science of Language: An Introduction

Primarily for Graduates

Italian 201r. Italian Studies Colloquium
Catalog Number: 6124
Francesco Erspamer
Half course (spring term). M., 5-7pm.
Current scholars in the field of Italian Studies present their most recent works on literature, art and architecture, history, and the social sciences. Students also learn how to conduct video interviews and write book reviews.
Note: Conducted in Italian and English.

Italian 262. About Time: Nostalgia, Apocalypse, and Change in Italian Culture
Catalog Number: 3847
Francesco Erspamer
Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16
Studies the development of the concept of time in modern thought, with examples drawn mostly from Italian literature. Readings include Galileo, Vico, Leopardi, Verga, Pirandello, Tomasi di Lampedusa, Buzzati.
Note: Conducted in Italian.

Cross-listed Courses

[History of Science 290. Critical History: Curating Images, Objects, Media: Seminar]

Graduate Courses of Reading and Research

See Note to Graduate Courses of Reading and Research in French.

*Italian 320. Italian Literature: Supervised Reading and Research
Catalog Number: 4834
Francesco Erspamer 5074, Franco Fido 2446, Giuliana Minghelli 4442, Lino Pertile 3416, and Jeffrey Schnapp 6277
Latin American Studies

Latin American Studies is an interdisciplinary concentration administered through Romance Languages and Literatures (RLL). Literature, History, Government, and Anthropology are among the sites where Latin American specialists offer a range of methods and materials to approach a complex cultural space. For additional courses offered in RLL in the field of Latin American Studies, see listings under Portuguese and Spanish.

Primarily for Undergraduates

Latin American Studies 70. Modernity, Culture and Politics in Latin America
Catalog Number: 3379
Mariano Siskind
Half course (spring term). Tu., 1-3 and an additional weekly section hour to be arranged. EXAM GROUP: 15, 16
Introduces students to central debates and problems that have shaped Latin American culture. We address questions of cultural identity, gender, race, politics, economics and aesthetics by looking at historical and literary texts, films, visual arts and urban development from an interdisciplinary perspective. We analyze colonial encounters; revolutions; US-Latin American relations; popular cultures from tango and samba to football and carnaval; Latin American cities and slums; and memory, trauma and traces of the region’s dictatorships.
Note: Conducted in Spanish. Readings in Spanish and English. This course, when taken for a letter grade, meets the Core area requirement for Foreign Cultures.

Latin American Studies 91r. Supervised Reading and Research
Catalog Number: 17128
Doris Sommer and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research on subjects not treated in regular courses.
Note: Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in Latin American Studies for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course work in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

*Latin American Studies 98. Tutorial—Junior Year
Catalog Number: 1224
Doris Sommer and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Weekly individual instruction for juniors pursuing a thesis honors track in Latin American Studies, culminating in the writing of a 20-25 page research paper in either Spanish or
Portuguese.

Note: Successful completion of one term of Latin American Studies 98 (or equivalent) is required of all thesis-track honors concentrators in Latin American Studies in their junior year.

*Latin American Studies 99. Tutorial—Senior Year
Catalog Number: 7959
Doris Sommer and members of the Department
Full course. Hours to be arranged.
Weekly individual instruction for honors seniors writing a thesis.

Note: For honors seniors writing a thesis. Successful completion of two terms of Latin American Studies 99 is required of all thesis-track honors concentrators. Students who not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit.

Prerequisite: Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

For Undergraduates and Graduates

Cross-listed Courses

Portuguese

The term “placement score” or “placement test” below and in the various course descriptions refers to the Portuguese placement test given during Freshman Week for freshmen, and usually on Registration Day for returning students.

Primarily for Undergraduates

Portuguese Aa. Beginning Portuguese I
Catalog Number: 7130
Clémence Jouët-Pastré and members of the Department
Half course (fall term). M., W., F., at 12 or 1.
An introductory course designed to introduce the student with little or no knowledge of the language to the Portuguese-speaking world. Focuses on fundamental communication skills -- listening, speaking, reading, and writing -- and, at the same time, provides exposure to Portuguese-speaking cultures through media broadcasts, literature, films, music, and videos.

Note: Conducted in Portuguese. May not be taken Pass/Fail but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Portuguese Aa website. Students with an advanced knowledge of Spanish should enroll in Portuguese Ac instead of Portuguese Aa.

Portuguese Ab. Beginning Portuguese II
Catalog Number: 30145
Clémence Jouët-Pastré and members of the Department
Half course (spring term). M., W., F., at 12 or 1.
This course is a continuation of Portuguese Aa. By the end of the course, students should be able
to communicate with native speakers about a wide range of topics, and they should have acquired insights into basic elements of Luso-Brazilian culture.

Note: Conducted in Portuguese. May not be taken Pass/Fail, but may be taken SAT/UNSAT by GSAS students. Not open to auditors. Section on-line on the Portuguese Ab website. Students with an advanced knowledge of Spanish should enroll in Portuguese Ad instead of Portuguese Ab.

Prerequisite: Portuguese Aa or permission of course head.

**Portuguese Ac. Beginning Portuguese for Spanish Speakers I**
Catalog Number: 0430
Clémence Jouët-Pastré and members of the Department
Half course (fall term). M., W., F., at 12 or 1.
An introductory language course designed for Spanish-speakers. Along with the fundamental communication skills—understanding, speaking, reading and writing—the course will focus on those features of Portuguese which are most difficult for Spanish speakers: pronunciation, idioms and grammatical structures particular to Portuguese. Students will be introduced to the cultures of the Portuguese-speaking world through readings and authentic materials, including films, music, and videotapes.

Note: Conducted in Portuguese. Requires a solid knowledge of but not necessarily native proficiency in Spanish. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Portuguese Ac website.

Prerequisite: 750 on the Spanish SAT II or the Harvard Placement test; 5 on the Spanish AP test; or a 40s level Spanish course.

**Portuguese Ad. Beginning Portuguese for Spanish Speakers II**
Catalog Number: 1315
Clémence Jouët-Pastré and members of the Department
Half course (spring term). M., W., F., at 12 or 1.
A continuation of Portuguese Ac. By the end of the second term, students should be able to communicate easily with native speakers and be acquainted with basic elements of Luso-Brazilian culture.

Note: Conducted in Portuguese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Portuguese Ad website.

Prerequisite: Portuguese Ac or permission of course head.

**Portuguese Ba. Introduction to Portuguese**
Catalog Number: 0514
Clémence Jouët-Pastré and members of the Department
Half course (spring term). Section I, M., W., 3-5; Section II, Tu., Th., 3-5.
A basic introductory course for students who can devote only one term to the study of Portuguese. Teaches fundamental communication skills—understanding, speaking, reading and writing—but does not offer a complete study of grammar.

Note: Conducted in Portuguese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Portuguese Ba website.
**Portuguese C. Intermediate Portuguese**  
Catalog Number: 7692  
Clémence Jouët-Pastré and members of the Department  
*Half course (fall term; repeated spring term). Fall: Section I, M., W., 2:30-4; Section II, Tu., Th., 11:30-1. Spring: Tu., Th., 1-2:30.*  
An intermediate course for students interested in expanding and strengthening their Portuguese language skills. Reading, writing, and conversational competency is emphasized through the study of the Luso-African-Brazilian cultures. The course aims to promote cross-cultural understanding through the use of authentic materials such as literary texts, multimedia, film, music, and videos.  
*Note:* Conducted in Portuguese. Recommended for students who wish to improve their ability to speak and write Portuguese. Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Section on-line on the Portuguese C website.  
*Prerequisite:* Portuguese Ab, Ad, or permission of course head.

**Portuguese 30 (formerly Portuguese 37). Brasil hoje: Contemporary Brazilian Culture through Media**  
Catalog Number: 5024  
Clémence Jouët-Pastré and members of the Department  
*Half course (fall term; repeated spring term). Fall term: Section I, M., W., 2:30-4; Section II, Tu., Th., 11:30-1. Spring term: Tu., Th., 1-2:30.*  
Engages in systematic grammar review, along with practice in writing and vocabulary enrichment, while examining contemporary Brazil as presented in Portuguese-language press, television, literature, and film. Analyzes the ways Brazilians and non-Brazilians construct different and conflicting images of Brazil and "Brazilianness." Issues of race relations, national identity, ethnicity, and gender addressed. Discussions based on historical and literary texts, advertisements, films, videotapes of Brazilian television, and current issues of newspapers and magazines.  
*Note:* Conducted in Portuguese. Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students.  
*Prerequisite:* Portuguese C, S-Dx, or permission of course head.

**Portuguese 40 (formerly Portuguese 44). Images of Brazil: Contemporary Brazilian Cinema**  
Catalog Number: 8893  
Clémence Jouët-Pastré and members of the Department  
*Half course (fall term; repeated spring term). Fall: M., W., 2:30-4. Spring: Section I: M., W., 2:30-4; Section II: Tu., Th., 11:30-1.*  
Examines major Brazilian films in their historical, political, and social context. Class discussion also focuses on documentaries, reviews, and critical articles. In-depth textual and grammatical analysis, vocabulary building, reflections on the similarities and differences of the oral and written Portuguese will lead students to achieve a high level of competency.  
*Note:* Conducted in Portuguese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Portuguese 40 website.  
*Prerequisite:* Portuguese C, 30, 37, or permission of course head.
*Portuguese 59. Portuguese and the Community
Catalog Number: 3322
Clémence Jouët-Pastré and members of the Department
Half course (spring term). Tu., 11:30–1.
An advanced language course examining the Luso-African-Brazilian experience in the US. Promotes community engagement as a vehicle for greater linguistic fluency and cultural understanding. Students will be placed with Boston-area community organizations and agencies. Class work focuses on readings and films by and about Luso-African-Brazilians and specific uses of Portuguese language from these communities. Authors include D. Macedo, Braga Martes, Margolis, Sales, Albues, and Villas Boas.
Note: Conducted in Portuguese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. To enroll, please contact Dr. Jouët-Pastré by January 15, 2013.
Prerequisite: Portuguese 30, 37, 40, or 44; a score of 100 on the Harvard Placement Test; or permission of the course head.

*Portuguese 61. The Portuguese-Speaking World via the Performing Arts: The Interspaces of Language and Culture in Brazil and Beyond
Catalog Number: 96774
Clémence Jouët-Pastré
Half course (fall term). Tu., Th., 1–2:30.
This course uses the performing arts as a point of departure for cultural and linguistic development. It includes lectures by scholars who present Lusophone cultures through visual media, plays, poetry, and interviews. Class discussions and student presentations serve as a basis for journal entries, essay writing, and performance. Grammar review and stylistic analysis are included throughout the course.
Note: Conducted in Portuguese. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors.
Prerequisite: Portuguese 30, 37, 40, or 44; a score of 100 on the Harvard Placement Test; or permission of course head.

*Portuguese 91r. Supervised Reading and Research
Catalog Number: 5589
Clémence Jouët-Pastré and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research on subjects not covered in regular courses.
Note: Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in Portuguese for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course work in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

*Portuguese 97. Tutorial—Sophomore Year: Brazilian Poetry and the Making of the Literary Canon
Catalog Number: 5769
Clémence Jouët-Pastré
**2012-2013 Previous Courses of Instruction**

*Half course (spring term). M., 5–7:30 p.m.*
The course will introduce students to the discussion of what constitutes a literary canon and how this discussion unfolded in Brazil. We will examine both the major works that belong to the official canon and the ones that were rejected including key literary pieces by Afro-Brazilians. Our discussions will be structured both around the rigorous analysis of classical pieces by literary critics that established the canon, and close readings of literary texts.

*Note:* Conducted in Portuguese. Successful completion of Portuguese 97 is required of all concentrators in Portuguese and Brazilian Studies in their sophomore year. May also be taken as the Sophomore Tutorial by concentrators in Latin American Studies and Romance Studies. May not be taken Pass/Fail.

*Portuguese 98. Tutorial — Junior Year*
Catalog Number: 8667
Clémence Jouët-Pastré and members of the Department

*Half course (fall term; repeated spring term). Hours to be arranged.*
Weekly individual instruction for juniors pursuing a thesis honors track in Portuguese and Brazilian Studies, culminating in the writing of a 20-25 page research paper in Portuguese.

*Note:* Successful completion of Portuguese 98 (or equivalent) is required of all thesis-track honors concentrators in Portuguese-Brazilian Studies. To enroll see course head.

*Portuguese 99. Tutorial — Senior Year*
Catalog Number: 8753
Clémence Jouët-Pastré and members of the Department

*Full course. Hours to be arranged.*
For honors seniors writing a thesis. Successful completion of one term of Portuguese 99 is required of all honors concentrators. To enroll, see course head.

*Note:* For honors seniors writing a thesis. Successful completion of two terms of Portuguese 99 is required of all thesis-track honors concentrators. Students who do not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit.

*Prerequisite:* Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

For Undergraduates and Graduates

**Portuguese 144. Waves of Change**
Catalog Number: 11776
Nicolau Sevcenko

*Half course (spring term). W., 5–7 p.m. EXAM GROUP: 9*
Studies Antropofagia, Sertanismo, and Tropicalia as aesthetic movements that shaped modern Brazilian culture.

*Note:* Conducted in Portuguese.

**Portuguese 180. Themes of Enchantment, Radiance and Epiphany in Brazilian Culture**
Catalog Number: 29198
Nicolau Sevcenko

*Half course (fall term). W., 5:30–7:30 p.m. EXAM GROUP: 9*
Brazilian culture is characterized by strong, diverse, and very peculiar spiritual legacies coming from its three main sources: Luso-European, African, and Native. They are expressed not only in literary works, but throughout cultural creations of all kinds, verbal and non-verbal, visual and aural, popular and mainstream.

Note: Conducted in Portuguese.

**Cross-listed courses**

**African and African American Studies 114x. From Cesária Évora to Dama Do Bling: Music, Language, and Digital Media in the Former Portuguese Colonies - (New Course)**

**Primarily for Graduates**

**Portuguese 250. Marginal, Underground and Eccentric: an aesthetics of subversion**

Catalog Number: 57469

Nicolau Sevcenko

Half course (fall term). Th., 5:30–7:30 p.m. EXAM GROUP: 18

Studies some lesser-known but quintessentially important writers, artists, dramatists and filmmakers who dissented, deviated from or confronted the cultural mainstream, thus helping to define the singularity of cutting-edge contemporary Brazilian culture.

Note: Conducted in Portuguese.

**Portuguese 260. The Devil at the Crossroads**

Catalog Number: 78405

Nicolau Sevcenko

Half course (spring term). Th., 5–7 p.m. EXAM GROUP: 18

Focuses on revolutionary changes in Brazilian culture in the 1950s and 1960s.

Note: Conducted in Portuguese.

**Graduate Courses of Reading and Research**

See Note to Graduate Courses of Reading and Research in French.

**Portuguese 321. Literature of Brazil: Supervised Reading and Research**

Catalog Number: 5933

Nicolau Sevcenko 5229

**Portuguese 330. Direction of Doctoral Dissertations**

Catalog Number: 4072

Joaquim-Francisco Coelho 7715 (on leave 2012-13), Sergio Delgado 6724 (on leave 2012-13), Bradley S. Epps 2880 (on leave 2012-13), Luis Fernández-Cifuentes 2091, Mary M. Gaylord 2632, Nicolau Sevcenko 5229, Mariano Siskind 5530, and Doris Sommer 2744

**Romance Languages**

See also courses in Linguistics.
Primarily for Graduates

Cross-listed Courses

Linguistics 200. Second Language Acquisition

Graduate Courses of Reading and Research

*Romance Languages 300. Seminar for Dissertation Writing in the Romance Literatures
Catalog Number: 9758
Mary M. Gaylord 2632
Half course (fall term; repeated spring term). Bi-weekly meetings. W., 2–4.
Addresses audience, voice, and ethics of critical writing (quotation, acknowledgement, controversy); and practical strategies for prospectus preparation, chapter organization, conference and job talks, publication. Meetings use manuscript work-shopping, reading, oral presentations, and guest lectures.
Prerequisite: Completion or imminent completion of PhD general examinations.

Romance Studies

Primarily for Undergraduates

[Romance Studies 79. Romance Languages and Cultures in Comparative Perspective]
Catalog Number: 8713
Elvira G. DiFabio and members of the Department
Half course (fall term). Hours to be arranged.
Highlights of the similarities and differences among the Romance languages, beginning with an overview of the historical development of the Romance languages from Latin, and moving on to the comparison of linguistic identifiers of French, Italian, Portuguese, and Spanish; may also include a discussion of Catalan. Topics will cover comparative phonology, morphology, and syntax, as well as some cross-cultural experiences such as immigration and translation.
Note: Expected to be given in 2013–14. Conducted in English; texts in original and in translation. May not be taken by RLL graduate students to fulfill the history of the language requirement.
Prerequisite: Advanced proficiency in one of the Romance Languages, or permission of the course head.

*Romance Studies 91r. Supervised Reading and Research
Catalog Number: 8210
Luis M. Girón Negrón and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research in subjects not treated in regular courses.
Note: Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in Romance Studies for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course
work in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

*Romance Studies 98. Tutorial—Junior Year
Catalog Number: 5203
Luis M. Girón Negrón and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Weekly individual instruction for juniors pursuing a thesis honors track in Romance Studies, culminating in the writing of a 20-25 page research paper in a Romance language.
Note: Successful completion of one term of Romance Studies 98 (or equivalent) is required of all thesis-track honors concentrators in Romance Studies in their junior year.

*Romance Studies 99. Tutorial–Senior Year
Catalog Number: 1067
Luis M. Girón Negrón and members of the Department
Full course. Hours to be arranged.
Weekly individual instruction for students writing a senior thesis in Romance Studies.
Note: For honors seniors writing a thesis. Successful completion of two terms of Romance Studies 99 is required of all thesis-track honors concentrators. Students who do not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit.
Prerequisite: Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

For Undergraduates and Graduates

*Romance Studies 101. Romance Translation: Theory and Practice - (New Course)
Catalog Number: 89225
Elvira G. DiFabio
Half course (spring term). Th., 1–3:30. EXAM GROUP: 15, 16, 17
Translating for art’s sake, or to form a national literature? Better yet, to foster ideological debate. And what about all those bad translations? Do you even need to know the original language?
Come explore the theory and practice of translation in and from the Romance languages.
Includes workshops on a variety of styles, literary devices, pragmatics, semantic and cultural distinctions.
Note: Conducted in English.
Prerequisite: An intermediate to advanced knowledge of at least one Romance language.

[Romance Studies 109. The Global Game: Soccer, Politics, and Popular Culture]
Catalog Number: 69265
Francesco Erspamer and Mariano Siskind
Half course (fall term). Hours to be arranged.
Soccer is not only the sport of the world, but a most socially significant practice. In Latin America and Europe it is a staple feature of popular culture, closely connected with national politics. The course will make use of filmic, visual, literary, theoretical, and historical materials to analyze the relationship of soccer to social movements, colonialism, violence, gender,
architecture, music, and the star system (Pelé, Maradona, Zidane, Totti, Cristiano Ronaldo, Messi).

Note: Expected to be given in 2014–15. Conducted in English.
Prerequisite: An excellent reading knowledge of at least one Romance language.

**Romance Studies 111. The World of Romance Language Cinemas: A Classical Age - (New Course)**
Catalog Number: 73327
Tom Conley
Studies early and classical cinemas in France, Italy, and Spain through comparative and close analysis. Includes films by Renoir, Vigo, Melville; Rossellini, de Sica, Visconti; Buñuel, García Berlanga, Erice.
Note: Conducted in English.
Prerequisite: An excellent reading knowledge of at least one Romance language.

**Cross-listed Courses**

[*Literature 110. Introduction to Experimental Criticism]*

**Literature 193. "What’s Love Got to Do With It"; Love Poetry of the Middle Ages and Early Modernity - (New Course)**

**Primarily for Graduates**

**Romance Studies 201. Approaches to Theory**
Catalog Number: 0934
Christie McDonald and members of the Department
Half course (fall term). W., 10–1. EXAM GROUP: 3, 4, 5
Department specialists address major topics in literary/cultural theory: formalism; semiotics; structuralism; post-structuralism; Marxism; psychoanalysis; deconstruction; cultural, post-colonial, feminist, and queer studies. Emphasis on theoretical canons, disciplinary controversies, and intersections among the disciplines.
Note: Conducted in English. Required of all graduate students in Romance Languages and Literatures.

**Romance Studies 205. Civic Humanities**
Catalog Number: 33387
Doris Sommer and Francesco Erspamer
Half course (fall term). M., 11:30–1. EXAM GROUP: 4, 5
An introduction to a developing field, Civic Humanities explores the arts and humanistic interpretation through a centuries-long tradition of civic engagement. Here the humanities are a site for promoting innovation and skills for active citizenship. Democracy and aesthetic judgment developed together to project citizens as co-artists of social constructions. Readings in this tradition of enlightened aesthetics include Kant, Schiller, Dewey, Freire, Gramsci, Ranciere, Mockus, Boal, Kester, Elster, Florida, Nussbaum, and Pasolini. Guest lectures by doctors, lawyers, political leaders, business experts, and public artists will develop specific areas of
innovation and represent potential mentors for students as they design original projects. 

*Note:* Conducted in English. Students are required to attend the lectures of Aesthetics and Interpretive Understanding 13 (Cultural Agents).

[*Romance Studies 219. Digital Humanities 2.0: a metaLAB(at)Harvard seminar*]

Catalog Number: 71716  
*Jeffrey Schnapp*  
*Half course (spring term). Hours to be arranged.*  
A seminar and workshop for the development of semester-long projects, the course provides an introduction to new scholarly models in the arts and humanities via readings, case studies and conversations with expert practitioners.  

*Note:* Expected to be given in 2013–14. Conducted in English. Not open to students currently enrolled in Literature 110.

**Romance Studies 220. Fragments of a Material History of Literature - (New Course)**

Catalog Number: 21805  
*Jeffrey Schnapp*  
*Half course (fall term). M., 3–5. EXAM GROUP: 8, 9*  
Literary studies examined from the perspective of the practices that have shaped ideas concerning literature, writing, speech, and communication: from scrolls and codices to the rise of printing and typewriting to digital writing.  

*Note:* Conducted in English.

**Spanish**

All students who have taken Spanish in secondary school are required to take the Placement Test given during Freshman Week for freshmen and usually on Registration Day for returning students.

A score of 5 in the College Board Advanced Placement Examinations in Spanish allows students to take Spanish courses numbered 40 to 90 or, if recommended, 100-level courses. All language courses are conducted in Spanish and include weekly writing assignments. For details, see the pamphlet Advanced Standing at Harvard College or apply to the Director of the Program of Advanced Standing.

**Primarily for Undergraduates**

**Spanish Aa. Beginning Spanish I**  
Catalog Number: 0507  
*Maria Luisa Parra-Velasco and members of the Department*  
*Half course (fall term; repeated spring term). Fall: M., through Th., at 9, 10, 11, 1, or 2. Spring: M., through Th., at 9, 10, or 2.*  
A basic beginning semester course for students with no previous study of Spanish. Emphasis on speaking, writing, reading, and listening, as the basis for the development of all three Communication Modes (Interpersonal, Interpretive, and Presentational). Hispanic cultures will be introduced through a variety of texts, including readings, music, art, and film.
Note: Conducted in Spanish. Open to students who have not previously studied Spanish or who have scored below 300 on the Harvard placement test. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish Aa website. Students who have studied Spanish for two years or more in secondary school must begin at Spanish Ab or higher.

**Spanish Ab. Beginning Spanish II**
Catalog Number: 3328
*Maria Luisa Parra-Velasco and members of the Department*
*Half course (fall term; repeated spring term). M., through Th., 9, 10, 11, 1, or 2.*
For students with the equivalent of one semester previous study of Spanish. Emphasis on strengthening students’ interpersonal, interpretive, and presentational skills in both oral and written Spanish. Hispanic cultures are presented through a variety of authentic texts, including short pieces of literature, essays, and newspaper articles. Music, art, and film are also included. After Spanish Aa and Ab, students should be able to engage in everyday conversations with native speakers, and read straightforward texts, both fiction and non-fiction, with relative ease.

**Note:** Conducted in Spanish. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish Ab website. Students who have studied Spanish for two years or more in secondary school must begin at Spanish Ab or higher. Upon the recommendation of the course head, students who have performed at a superior level in this course may enroll in any course for which they are linguistically prepared.

**Prerequisite:** A score between 301-450 on the SAT II test or on the Harvard Placement Test, Spanish Aa, or permission of course head.

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*Spanish Acd. Intensive Beginning Spanish: Special Course*
Catalog Number: 5577
*Johanna Damgaard Liander and members of the Department*
*Full course (fall term; repeated spring term). M. through F., at 9 and Tu., Th., at 10. EXAM GROUP: 2, 11*
A beginning class for students with no previous formal training in Spanish but with competence in at least one foreign language. Emphasis on communication skills. Language instruction supplemented by cultural and literary readings and film.

**Note:** Not open to auditors. May not be used to fulfill the language requirement. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Interested students should contact Dr. Liander by e-mail no later than August 24, 2012 for fall term enrollment and no later than December 15, 2012 for spring term enrollment. Upon the recommendation of the course head, students who have performed at a superior level in this course may enroll in any course for which they are linguistically prepared.

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**[Spanish Ax. Reading Spanish]**
Catalog Number: 5318
*Adriana Gutiérrez and members of the Department*
*Half course (fall term). Hours to be arranged.*
An introduction to reading and translating modern Spanish texts for students who require only a basic knowledge of Spanish for research purposes. Spanish Ax presents the principal structures of Spanish grammar in a systematic and coherent manner and, at the same time, makes reading
and translation assignments as discipline-specific as possible for each student’s needs.

*Note:* Expected to be given in 2013–14. Conducted in English. Not open to students with a score of 500 or above on the Harvard Placement Test or on the SAT II Spanish test, to those with more than one year of undergraduate Spanish, or to auditors. May not be used to fulfill the language requirement and may not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students.

**Spanish C. Intermediate Spanish**
Catalog Number: 5819
*Adriana Gutiérrez and members of the Department*

*Half course (fall term; repeated spring term). Sections M. through Th., at 9, 10, 11, or 1.*
An intermediate language and culture class that aims to consolidate and expand the skills of listening comprehension, speaking, reading and writing in Spanish. Includes a comprehensive review of the grammar and reinforces linguistic acquisition through texts, movies, art and multimedia projects to acquaint students with cultural issues relevant to the Spanish-speaking world.

*Note:* Conducted in Spanish. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish C website. Upon the recommendation of the course head, students who have performed at a superior level in this course may enroll in any course for which they are linguistically prepared.

*Prerequisite:* Spanish Ab, Acd, 451-600 on the SAT II test or on the Harvard Placement Test, or permission of course head.

**Spanish 30. Advanced Spanish Language I: Four Countries and their Cultures**
Catalog Number: 0479
*Johanna Damgaard Liander and members of the Department*

*Half course (fall term; repeated spring term). Sections M. through Th., at 9, 10, 11, or 12.*
An advanced language class that reinforces the practice of oral and written communication in Spanish through topics in contemporary cultural materials from Spain and Latin America. Students will focus on improving proficiency, refining pronunciation and acquiring vocabulary. In addition to in-class discussions, course work involves grammar review and practice in writing. Consult course website for current semester topics.

*Note:* Conducted in Spanish. May not be taken Pass/Fail but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish 30 website. Upon the recommendation of the course head, students who have performed at a superior level in this course may enroll in any course for which they are linguistically prepared.

*Prerequisite:* A score between 601-680 on the SAT II test or on the Harvard Placement Test, Spanish C, or permission of course head.

**Spanish 40. Advanced Spanish Language II: Viewing the Hispanic World**
Catalog Number: 9393
*Johanna Damgaard Liander and members of the Department*

*Half course (fall term; repeated spring term). Fall: Sections M., W., F., at 9, 10, 11, or 12; Spring: Section I: Tu., Th., 8:30-10; Section II: 10-11:30; Section III: 1-2:30.*
An advanced language and culture class that further develops linguistic competence using a region or regions of the Hispanic world as a focus for class discussion, grammar review, and an introduction to Hispanic social contexts and texts. Course materials may also include films, interviews, paintings, photography, music, selections from the press, as well as literary or
historical readings. Frequent written and oral assignments, and a thorough review of grammar. Consult course website for current semester topics.

Note: Conducted in Spanish. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish 40 website. Upon the recommendation of the course head, students who have performed at a superior level in this course may enroll in any course for which they are linguistically prepared.

Prerequisite: A score between 681-720 on the SAT II test or on the Harvard Placement Test, AP 5, Spanish 30, or permission of course head.

**Spanish 50. Writing and Performance**
Adriana Gutiérrez and members of the Department
Half course (fall term; repeated spring term). Section I: Tu., Th., 10-11:30; Section II: Tu., Th., 11:30-1; Section III: Tu., Th., 1-2:30.

An advanced language course designed to strengthen and develop competence in written expression. Close reading of texts in literary and non-literary genres will help students refine personal style. The performance of short excerpts of plays, combined with advanced work on oral expression and phonetics, will help students increase their fluency and ease of expression.

Note: Conducted in Spanish. Recommended for concentrators. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students. Not open to auditors. Section on-line on the Spanish 50 website.

Prerequisite: A score between 721-750 on the SAT II test or on the Harvard Placement Test, Spanish 40, or permission of course head.

**Spanish 59. Spanish and the Community**
Maria Luisa Parra-Velasco and members of the Department
Half course (fall term; repeated spring term). Tu., Th., 10-11:30, and four hours of activities-based learning per week.

An advanced language course that examines the richness and complexity of the Latino experience in the US while promoting community engagement as a vehicle for greater linguistic fluency and cultural understanding. Students are placed with community organizations within the Boston area and volunteer for four hours a week. Class work focuses on expanding students’ oral and written proficiency in Spanish through discussing and analyzing readings, arts, and films by and about Latinos in the US.

Note: Interested students must apply in writing to Dr. Parra no later than August 18, 2012 for fall term enrollment and no later than January 15, 2013 for spring term enrollment. Not open to auditors.

Prerequisite: A score between 721-750 on the SAT II test or on the Harvard Placement Test, Spanish 40 or permission of course head.

**[Spanish 61a. Pre-Textos: Las artes interpretan]**
Doris Sommer
Half course (fall term). Hours to be arranged.

Texts become prompts for art-making in this class. By inspiring painting, dance, play, music,
sculpture, costumes, texts lead to deep and daring interpretations. Latin American classics that might otherwise seem difficult become raw material for creativity as students stretch their command of Spanish. They learn that arts interpret and explore meanings and that theory is a user-friendly afterthought. This training prepares facilitation of Pre-Texts workshops in Boston and abroad.

*Note:* Expected to be given in 2014–15. Conducted in Spanish. Students are allowed to take a maximum of two courses at the 60-level in Spanish, not including Spanish 60.

*Prerequisite:* A score above 750 on the SAT II test or Harvard Placement test.

**Spanish 61n. Advanced Spanish Language and Culture: The Ethics of Business**
Catalog Number: 17538 Enrollment: Limited to 30.

*Adriana Gutiérrez and members of the Department*

Half course (fall term; repeated spring term). Section I: Tu., Th., 10-11:30; Section II: Tu., Th., 11:30-1. EXAM GROUP: 12, 13

An advanced language and culture class that examines literature and films portraying the political, sociological, financial and environmental impact of multinational companies doing business in Latin America. Students’ linguistic competency is developed through discussion of the ethics of business, grammar reviews, and weekly writing assignments. Students will also choose a specific project for a business in Latin America and research its possible outcome and social, political, and environmental consequences.

*Note:* Interested students must apply in writing to Dr. Gutiérrez no later than August 21st, 2012 (Fall Term) or January 15, 2013 (Spring Term). Not open to auditors. May not be taken Pass/Fail, but may be taken Sat/Unsat by GSAS students.

*Prerequisite:* A score between 751 and 780 on the SAT II test or on the Harvard Placement test, a Spanish 50-level course, or permission of course head. Students are allowed to take a maximum of two courses at the 60-level in Spanish, not including Spanish 60.

**Spanish 62. Translation Workshop on 20th-Century Spain**
Catalog Number: 99782 Enrollment: Limited to 15.

Daniel Aguirre Oteiza

Half course (spring term). M., W., 11:30–1. EXAM GROUP: 4, 5

Through close readings and translations centering on 20th-century Spanish history and society, students hone their linguistic, grammatical, and stylistic skills, and acquire the interpretive skills required to comprehend and analyze increasingly complex literary and cultural texts. Course materials include short stories, poems, newspaper articles, memoirs, travel journals and historical essays.

*Note:* Conducted in Spanish. Recommended for concentrators. Interested students should contact Dr. Daniel Aguirre Oteiza no later than August 26, 2012.

*Prerequisite:* A score between 751 and 780 on the SAT II test or on the Harvard Placement test, a Spanish 50-level course, or permission of course head. Students are allowed to take a maximum of two courses at the 60-level in Spanish, not including Spanish 60.

**Spanish 70a. Heroes, Rogues, and Significant Others: Voices from Medieval and Early Modern Spain**
Catalog Number: 1587

Mary M. Gaylord
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Who are "el Cid", Celestina, Don Quixote, Don Juan? We know these mythic characters and cultural types like the love-struck priest, the pícaro, the sentimental Moor, the conquistador, through representations of their spoken words in now-classic works of early Spanish literature. As we explore the texts and historical contexts that produced them, we bring their voices to life once again through dramatic reading and performance.

Note: Conducted in Spanish. This course includes student art-making as part of the Harvard Arts Initiative. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.

Prerequisite: A score above 780 on the SAT II or the Harvard Placement test; a 40-, 50-, or 60-level course in Spanish; or permission of course head.

[Spanish 70c. Documenting Spanish Modernity: A Survey of Spanish Literature and Culture from 1700]
Catalog Number: 7713
Luis Fernández-Cifuentes
Half course (fall term). Hours to be arranged.
From philosophical essays to newspaper articles, from romantic tragedy to turn-of-the-century films, from early autobiography to dirty realism, from academic landscape painting to comic strips, this course will present a provocatively diverse set of documents that will help understand Spain’s equivocal and frequently contested Modernity.

Note: Expected to be given in 2013–14. Conducted in Spanish. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C.

Prerequisite: A score above 780 on the SAT II or the Harvard Placement test; a 50- or 60-level course in Spanish; or permission of course head.

[Spanish 71a. Continuity and Discontinuity in Colonial Latin America]
Catalog Number: 4319
José Rabasa
Half course (spring term). Hours to be arranged.
An overview of literary and cultural production in the Americas before and after the Spanish invasion. Topics include pre-Columbian visual and verbal expressions; discovery, invention, conquest, and resistance; the historiography of the New World; native depictions of the colonial world.

Note: Expected to be given in 2013–14. Conducted in Spanish. Required for concentrators in the Hispanic Studies track (as an alternative to Spanish 71b), and for all concentrators in Latin American Studies. The Friday class is devoted to section discussion.

Prerequisite: A score above 780 on the SAT II or the Harvard Placement test; a 50- or 60-level course in Spanish; or permission of course head.

Spanish 71b. Introduction to Modern Latin American Literature
Catalog Number: 6700
Kahlil Chaar-Pérez
Half course (fall term). M., W., at 12, and an additional weekly section hour to be arranged.
EXAM GROUP: 5
This course is a survey of Latin American literatures from the last decades of the nineteenth


2012-2013 Previous Courses of Instruction

century to the present. It offers an overview of particularly salient moments in modern Latin American cultural history, placing emphasis on the ways in which specific literary works relate to the social and political developments that have shaped the region. Readings include texts by Darío, Martí, Huidobro, Borges, Rulfo, and Donoso, among others.

Note: Conducted in Spanish. Third hour devoted to discussion of texts studied. This course, when taken for a letter grade, meets the Core requirement for Literature and Arts C.

Prerequisite: A score above 780 on the SAT II or on the Harvard Placement test; a 50-, or 60-level course in Spanish; or permission of course head.

**Spanish 90c. Spectacles of Race: Representations of Racial Belonging and Difference in the Hispanic Caribbean - (New Course)**

Catalog Number: 39949

Kahlil Chaar-Pérez

Half course (spring term). M., W., at 12, and an additional weekly section hour to be arranged. EXAM GROUP: 5

This course explores racialized representations of belonging and difference in the Hispanic Caribbean, examining how cultural discourses and performances of racial identity and mixture intersect with Cuban, Puerto Rican, and Dominican conceptions of regional and national sameness. In addition, we will look at cultural forms—such as negrismo poetry—that, in questioning these conceptions, imagine “another Caribbean.” Course materials include plays, poems, film, short stories, and novels.

Note: Conducted in Spanish.

Prerequisite: A previous course in Spanish at the 60- or 70-level; 800 on the SAT II test or on the Harvard Placement test; or permission of the course head.


Catalog Number: 27284

Sergio Delgado

Half course (fall term). Hours to be arranged.

This course is structured around a set of art and literary works that engage the US-Mexico border. It seeks to understand the fluid nature of the border region along with its recurring themes and dynamics, focusing on the complex links between literary texts, artistic practices, and the increasingly pressing social and political issues of the region. Materials discussed include works by Vasconcelos, Paz, Fuentes, Monsiváis, Poniatowska, Bolaño, Anzaldúa, Coco Fusco and Ricardo Domínguez.

Note: Expected to be given in 2013–14.

**Spanish 90tv. Displacing Spain: Workshop on 20th and 21st-Century Transatlantic Poetry**

Catalog Number: 54744

Daniel Aguirre Oteiza

Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7

We will read, listen to, and play with poems dealing with transatlantic perspectives on and from modern Spain. Close attention paid to the relation between poetry and identity, motherland, exile, and nomadism in Spanish and Latin American poets such as Bolaño, Cernuda, Darío,
García Lorca, Neruda, Peri Rossi, and Vallejo, among others. Includes formal and thematic analysis of poems and hands-on work with texts in Spanish through translation.

Note: Conducted in Spanish.

Prerequisite: A previous course in Spanish at the 60- or 70-level; 800 on the SAT II test or on the Harvard Placement test; or permission of the course head.

*Spanish 91r. Supervised Reading and Research
Catalog Number: 1586
Johanna Damgaard Liander and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Tutorial supervision of research on subjects not treated in regular courses.

Note: Limited to juniors and seniors. Students wishing to enroll must petition the Undergraduate Adviser in Spanish for approval, stating the proposed project, and must have the consent of the proposed instructor. Ordinarily, students are required to have taken some course work in the area as background for their project. May not be taken more than twice, and only once for concentration credit.

*Spanish 97. Tutorial—Sophomore Year
Catalog Number: 2315
Luis Fernández-Cifuentes
Theory in Praxis: Students will read, write, and speak about different modes of analysis of poetry, narrative prose, and cinema (stylistics, semiotics, psychoanalysis, deconstruction, gender studies, etc.), as practiced by a variety of pioneering scholars and artists, from Yuri Lotman and Barbara Johnson to Sergei Eisenstein and Laura Mulvey. Students will in turn put to work those modes of analysis on a number of Spanish and Latin American texts and films.

Note: Conducted in Spanish. Requirements include short weekly papers and regular participation in class discussions. Required for all concentrators in Hispanic Studies in their sophomore year, but open to others. May also be taken as the Sophomore tutorial for concentrators in Latin American Studies and Romance Studies.

Prerequisite: 800 on the Harvard Placement test; a 50-, 60-, or 70-level course in Spanish; or permission of course head.

*Spanish 98. Tutorial—Junior Year
Catalog Number: 5511
Johanna Damgaard Liander and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Weekly individual instruction for juniors pursuing a thesis honors track in Hispanic Studies, culminating in the writing of a 20-25 page research paper in Spanish.

Note: Letter-graded. Successful completion of one term of Spanish 98 (or equivalent) is required of all thesis-track honors concentrators in Hispanic Studies in their junior year.

*Spanish 99. Tutorial—Senior Year
Catalog Number: 5867
Johanna Damgaard Liander and members of the Department
Full course. Hours to be arranged.
Weekly individual instruction for honors seniors writing a thesis. Completion of two terms of Spanish 99 is required of all seniors pursuing a thesis honors track. 

*Note:* For honors seniors writing a thesis. Successful completion of two terms of Spanish 99 is required of all thesis-track honors concentrators. Students who do not complete a thesis are required to submit a substantial paper in order to receive either half course or full course credit. 

*Prerequisite:* Satisfactory completion of a junior tutorial and faculty approval of proposed thesis topic.

**Cross-listed Courses**

**Aesthetic and Interpretive Understanding 13. Cultural Agents**

*Freshman Seminar 42q. Modernity, Globalization and Cultural Identity in Latin America*  

**For Undergraduates and Graduates**

Open to students with 800 on the Harvard Placement Test or SAT II, a score of 5 on the Advanced Placement Test in language or literature, previous coursework at Harvard of an appropriate level, or permission of course head. For other related courses, see also Latin American Studies and Romance Studies.

**[Spanish 110. Hispanic Literature: The Middle Ages]**

Catalog Number: 9402

*Luís M. Girón Negrón*

*Half course (spring term). Hours to be arranged.*  

Introduction to Old Spanish literature from its origins through the 15th century. Close reading of representative works in historical context: *Cantar de Mío Cid, Milagros de Nuestra Señora, Libro de buen amor, Conde Lucanor, Laberinto de Fortuna, Coplas a la muerte de su padre, Cárcel de amor, Romancero selections* and La Celestina. Selective attention to critical approaches and overarching themes in the comparative study of medieval Iberian literatures.  

*Note:* Expected to be given in 2013–14. Conducted in Spanish. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C. Additional readings and alternate requirements for graduate students seeking to fulfill their General Exam in Medieval Spanish for Non-Specialists.

**Spanish 124. Don Quixote and the Art of Reading**

Catalog Number: 1378

*Mary M. Gaylord*

*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  

In the beginning was the book. From his library the *hidalgo*, bent on writing himself into History, sallies forth into a world of actors, storytellers, and readers. How do books come by their power to shape individuals and their world? We read Cervantes’ masterpiece alongside seminal Renaissance works his characters and readers knew (Erasmus, Vives, More, Castiglione), and modern studies of reading and print culture.  

*Note:* Conducted in Spanish; an advanced reading knowledge of Spanish is essential. There will be class visits to the Houghton Library of Rare Books and screenings of film versions of the novel. This course, when taken for a letter grade, meets the Core area requirement for Literature
and Arts A.

Prerequisite: Coursework in Spanish at the 70-, 90-, or 100-level, or permission of the instructor.

**Spanish 134. Nahuatl (Aztec) Language and Culture**

Catalog Number: 7452

José Rabasa

Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

Offers an introduction to reading classical Nahuatl language through James Lockhart’s *Nahuatl as Written*. Readings include paradigmatic examples of the Mesoamerican worldview drawn from poetry, history, and myth. Examines the interrelation between alphabetical writing, pictography, and orality.

*Note:* Conducted in English or Spanish.

**Spanish 149. Filming the Text**

Catalog Number: 11542

Luis Fernández-Cifuentes

Half course (fall term). Hours to be arranged.

We will explore the complex process that takes place when certain literary texts (novels like Unamuno’s *La tía Tula*; short stories like Aldecoa’s *Los pájaros de Badem-Badem* or García Morales’s *El Sur*; and, especially, plays like García Lorca’s *Bodas de sangre* or Valle-Inclán’s *Divinas palabras*) are transformed into films by such prominent directors as Luis Buñuel, Juan Antonio Bardem, Carlos Saura, and Mario Camus.


Prerequisite: Previous coursework in Spanish at the 90- or 100-level; or the permission of the course head.

**Spanish 152. Magical Realism and Its Discontent: Latin American Novels That Didn’t Boom**

Catalog Number: 0215

Mariano Siskind

Half course (spring term). M., 3-5, and an additional weekly section hour to be arranged. EXAM GROUP: 8, 9

Carpentier and García Márquez found a narrative form to express Latin America’s aesthetic particularity through magic and marvel. Since the publication of *Cien años de soledad*, its remarkable impact generated different experimental responses attempting to work through Latin American social reality in very different ways. We read novels and short stories by Carpentier, García Márquez, Rulfo, Cortázar, Borges, Donoso, Saer, Cabrera Infante, Glantz, Bolaño, Fuguet, Bellatin and Aíra. Also comics and films.

*Note:* Conducted in Spanish.

**Spanish 173. Madrid, fin-de-siècle**

Catalog Number: 4425

Luis Fernández-Cifuentes

Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13

Madrid’s first turn of the century as a modern metropolis was marked by the innovative visions of the "generation of 1898" (the year Spain’s colonial empire ended); the second, by the
aftermath of Franco’s dictatorship. This course will articulate comparative analyses of multicultural issues around those two historical "ends": from the architecture of the Gran Vía and Baroja’s engravings to the Castellana "skyscrapers" and Antonio López’s paintings; from Valle-Inclán’s plays to Almodóvar’s films; from workers’ movements to socialist democracy. 

*Note:* Conducted in Spanish.

**Spanish 179. Regarding the Pain of Spain - (New Course)**
Catalog Number: 10194
Daniel Aguirre Oteiza
Half course (fall term). Tu., 3-5, and an additional weekly section hour to be arranged. EXAM GROUP: 17, 18
We will explore modern representations of violence in Spanish history through close analyses of short stories, novels, memoirs, paintings, and films by Spanish and some Latin American authors. Issues discussed may include *la España negra*, black humor, bullfighting, colonial power, concentration camps, gothic horror, sexual abuse, state repression, terrorism.

*Note:* Conducted in Spanish.

**Spanish 181. Fugitive Islands: Cuban and Puerto Rican Imaginaries of Subjection and Freedom in the Nineteenth and Early-Twentieth Century - (New Course)**
Catalog Number: 91471
Kahlil Chaar-Pérez
Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18
This course asks how Cuban and Puerto Rican elites, especially intellectuals, imagined themselves as colonial subjects, how they represented colonial society, and how they negotiated, accommodated to, and struggled against colonialism. In particular, we will consider key issues such as the specter of the Haitian Revolution, slave economy, the emergence of the US as an imperial power, elite transatlantic networks, patriotic discourse, anticolonial movements, and working-class intellectuals.

**Spanish 194. The Borges Machine - (New Course)**
Catalog Number: 25301
Mariano Siskind
Half course (fall term). Tu., 1-3, and an additional weekly section hour to be arranged. EXAM GROUP: 15, 16
We study Jorge Luis Borges’s poetry, short stories, and essays; from *Fervor de Buenos Aires* to *El Aleph*; from his scripts and the films based on them to the cultural constellations that rose around him, as well as those his work created. We will think of Borges as a writer, but also as literary machine, an artifice that produces meaning in the works of other writers and in cultural formations beyond Argentina and Latin America.

*Note:* Conducted in Spanish.

**Cross-listed Courses**

**African and African American Studies 124. Tobacco and Sugar - (New Course)**
[History of Art and Architecture 197gr. Colonial Art]
[Literature 157 (formerly Comparative Literature 111). From Type to Self in the Middle Ages]

**Primarily for Graduates**

**Spanish 201. Historia de la lengua española**  
Catalog Number: 5610  
Luis M. Girón Negrón  
*Half course (fall term). Th., 1-3, and an additional weekly discussion hour on Fridays to be arranged. EXAM GROUP: 15, 16*  
Introducción a la historia de la lengua española desde sus orígenes hasta el presente. Escarceos en lingüística histórica en el marco de la historia literaria y el estudio comparado de las lenguas románicas. Acercamiento interdisciplinario.  
*Note:* Conducted in Spanish. Required of graduate students in Spanish and Portuguese.

**Spanish 218r. Colonial/Postcolonial Studies**  
Catalog Number: 8907  
José Rabasa  
*Half course (fall term). W., 1:30–3:30. EXAM GROUP: 6, 7, 8*  
Is there a history of voice? What is the nature of the materiality of voice recorded by mimetic apparatuses (gramophones, alphabet, iconic scripts, film)? Particular attention will be placed on objects from the indigenous Americas.  
*Note:* Conducted in Spanish.

**Spanish 243. Foundational Fiction and Film**  
Catalog Number: 3129  
Doris Sommer  
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*  
Through novels that helped to consolidate nation-states in Latin America, explores modernity as personal and public lessons in laissez-faire. Sequels in film, telenovelas, performances show tenacity of genre. Links between creativity and citizenship. Theorists include Anderson, Foucault, Arendt, Lukacs, Flaubert.  
*Note:* Conducted in Spanish.

**Spanish 259. The Woman of a Thousand Faces: Literary and Visual Representations of Eva Perón - (New Course)**  
Catalog Number: 42322  
Beatriz Sarlo  
*Half course (fall term). Th., 3:30–5:30. EXAM GROUP: 17, 18*  
We look into literature, theatre, film, paintings, and photography—from Borges to Rodolfo Walsh, from Gisèle Freund to Copi, from banners to Santoro—to understand Eva’s myth and the place of Peronismo in Argentine culture.  
*Note:* Conducted in Spanish. Primarily for graduate students; open to qualified juniors and seniors with the permission of the instructor.
[Spanish 269. Body Matters and Market Forces in Latin American Literature and Culture]
Catalog Number: 99479
Sergio Delgado
Half course (fall term). Hours to be arranged.
Traces and analyzes social and symbolic dynamics of urban commodity capitalism. Emphasis on the body and perception as contested sites of coercion and critical agency. Readings by Benjamin, Arlt, Adorno, Siqueiros, Merleau-Ponty, Paz, Eltit.
Note: Expected to be given in 2014–15.

Spanish 281r. Graduate Seminar: Don Quixote’s Library
Catalog Number: 9785
Mary M. Gaylord
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
Using reading as mirror of quixotic madness, Cervantes’ parodic and satiric agendas, and early modern cultural horizons, we read chivalric, pastoral, Moorish romance; wonder books; poetry, poetics, and "true histories" in relation to Don Quijote.
Note: Conducted in Spanish and English. An advanced reading knowledge of Spanish is essential.

Spanish 285cr. Graduate Seminar: Money and Realism in Galdós’s Times
Catalog Number: 1104
Luis Fernández-Cifuentes
Half course (spring term). Th., 2:30–5. EXAM GROUP: 16, 17, 18
The function and circulation of money in realism’s representations of modern urban societies: monetary value and the modern concepts of need, wealth, happiness, poverty, and labor; money and gender; economics and the rhetoric of realism.
Note: Conducted in Spanish.

Cross-Listed Courses

*[Comparative Literature 211. Mysticism and Literature: Seminar]*
Comparative Literature 252. The Literatures of Medieval Iberia: Approaches and Debates in their Comparative Study

Graduate Courses of Reading and Research

See Note to Graduate Courses of Reading and Research in French.

*Spanish 320. Spanish and Hispanic-American Literature: Supervised Reading and Research*
Catalog Number: 5764
Sergio Delgado 6724 (on leave 2012-13), Luis Fernández-Cifuentes 2091, Mary M. Gaylord 2632, Luis M. Girón Negrón 3060, José Rabasa 5844, Mariano Siskind 5530, Doris Sommer 2744, and Diana Sorensen 4214
*Spanish 330. Direction of Doctoral Dissertations*
Catalog Number: 2143
Joaquim-Francisco Coelho 7715 (on leave 2012-13), Sergio Delgado 6724 (on leave 2012-13), Bradley S. Epps 2880 (on leave 2012-13), Luis Fernández-Cifuentes 2091, Mary M. Gaylord 2632, Luis M. Giron Negrón 3060, Francisco Márquez Villanueva 5064, José Rabasa 5844, Mariano Siskind 5530, Doris Sommer 2744, and Diana Sorensen 4214

**ROTC**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

The Faculty of Arts and Sciences, in cooperation with the Massachusetts Institute for Technology (MIT), offers Harvard undergraduates the opportunity to participate in the Reserve Officers Training Corps (ROTC) through cross-registration. More information on cross-registration is available through the [Harvard University 2011-2012 Course Catalog](#).

For a full description of the Air Force ROTC, Army ROTC, and Naval ROTC programs see the [MIT Course Catalog for 2011-2012](#).

**Naval ROTC**

The [Naval ROTC Program in Naval Science](#) offers courses for spring term, 2012.

**Air Force ROTC**

The [Air Force ROTC Program in Aerospace Studies](#) offers courses for spring term, 2012.

**Army ROTC**

The [Army ROTC Program in Military Science and Leadership](#) offers courses for spring term, 2012.
Russia, Eastern Europe, and Central Asia

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Standing Committee on the Degree of Master of Arts in Regional Studies—
Russia, Eastern Europe, and Central Asia

Terry D. Martin, George F. Baker III Professor of Russian Studies (Chair)
Jonathan H. Bolton, Professor of Slavic Languages and Literatures
Julie A. Buckler, Professor of Slavic Languages and Literatures, Harvard College Professor
Timothy J. Colton, Morris and Anna Feldberg Professor of Government and Russian Studies
Grzegorz Ekiert, Professor of Government
Kelly A. O’Neill-Uzgiris, Associate Professor of History
Serhii Plokii, Mykhailo S. Hrushev’skyi Professor of Ukrainian History
Stephanie Sandler, Ernest E. Monrad Professor of Slavic Languages and Literatures
Justin Weir, Professor of Slavic Languages and Literatures and of Comparative Literature (on leave 2012-13)

Other Faculty Offering Instruction in Regional Studies—Russia, Eastern Europe, and Central Asia

Laura L. Adams, Lecturer on Sociology

This is a two-year interdisciplinary program leading to the AM degree. The REECA program aims to provide students with a firm grounding in the history, culture, language, politics, and economics of Russia, and of other countries of the former Soviet Union and Eastern Europe. Graduates typically enter careers in government service, international trade or finance, journalism, or consulting; some pursue further training in business, law, or academia.

The course of studies takes into account the previous background, as well as the professional needs and interests, of the individual student. In addition to offerings by the Faculty of Arts and Sciences, students may cross-register for courses at other schools of Harvard University, MIT, and the Fletcher School of Law and Diplomacy. Students who have completed basic program requirements may seek permission for individual research under faculty direction.

Below is a partial list of departments offering courses on Russian, East European, and Central Asian Studies:

Anthropology, Comparative Literature, Government, History, History of Art and Architecture,
Near Eastern Languages and Civilizations (for courses on Islamic civilization, as well as languages of Central Asia and the Caucasus), Slavic Languages and Literatures, Sociology, and Ukrainian Studies.

For more information on courses offered, please see individual departmental listings, or visit the REECA website at daviscenter.fas.harvard.edu/student—programs/masters.html

**Primarily for Graduates**

*Regional Studies — Russia, Eastern Europe, and Central Asia 298 (formerly *Regional Studies — Russia, Eastern Europe, and Central Asia 299a), Master’s Thesis Reading and Research*

Catalog Number: 3938  
Enrollment: Limited to master’s degree candidates in the REECA Program.  
Laura L. Adams 4874 and members of the Faculty  
Half course (fall term; repeated spring term). Hours to be Arranged.  
Supervised reading and research to fulfill the thesis requirement in the master’s degree program in Regional Studies—Russia, Eastern Europe, and Central Asia.  
*Note:* May be substituted for RSRA 299hf only with the permission of the Academic Advisor. Master’s degree candidates normally complete both *RSRA 298hf/298 and 299hf/299 to fulfill the thesis requirement. Course must be taken for letter grade.

*Regional Studies — Russia, Eastern Europe, and Central Asia 298hf. Master’s Thesis Reading and Research - (New Course)*

Catalog Number: 14813  
Laura L. Adams 4874 and members of the Faculty  
Half course (throughout the year). Hours to be arranged.  
Interdisciplinary proseminar designed to orient master’s degree students in Regional Studies—Russia, Eastern Europe, and Central Asia to theoretical and methodological approaches in the field, including research design for academic and policy research.

*Regional Studies — Russia, Eastern Europe, and Central Asia 299 (formerly *Regional Studies — Russia, Eastern Europe, and Central Asia 299b), Master’s Thesis Development and Writing*

Catalog Number: 1931  
Enrollment: Limited to master’s degree candidates in the REECA Program.  
Terry D. Martin 2966 and members of the Faculty  
Half course (fall term; repeated spring term). Hours to be arranged.  
A continuation of RSRA 298/298hf, culminating in the final master’s thesis.  
*Note:* May be substituted for RSRA299hf only with the permission of the Academic Advisor. Master’s degree candidates normally complete both *RSRA 298hf/298 and 299hf/299 to fulfill the thesis requirement. Course must be taken for letter grade.

*Regional Studies — Russia, Eastern Europe, and Central Asia 299hf. Master’s Thesis Development and Writing - (New Course)*

Catalog Number: 81442
Terry D. Martin and members of the Faculty
Half course (throughout the year). Hours to be arranged.
A continuation of *RSRA 298hf, culminating in the final master’s thesis.
Note: Master’s degree candidates are normally required to complete *RSRA 298hf in the first year and *RSRA 299hf in the second year of graduate study.

Sanskrit and Indian Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

The Department of Sanskrit and Indian Studies expanded into a new department, South Asian Studies, as of July 1, 2011. Please see the Department of South Asian Studies for course listings.

Slavic Languages and Literatures

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Slavic Languages and Literatures

Julie A. Buckler, Professor of Slavic Languages and Literatures, Harvard College Professor (Chair)
Anna Baranczak, Preceptor in Slavic Languages and Literatures
Stanislaw Baranczak, Alfred Jurzykowski Professor of Polish Language and Literature
Jonathan H. Bolton, Professor of Slavic Languages and Literatures
Svetlana Boym, Curt Hugo Reisinger Professor of Slavic Languages and Literatures and Professor of Comparative Literature
Patricia R. Chaput, Professor of the Practice of Slavic Languages (on leave 2012-13)
Natalia Chirikov, Preceptor in Slavic Languages and Literatures
Steven Clancy, Senior Lecturer on Slavic Languages and Literatures and Director of the Slavic Language Program
Volodymyr Dibrova, Preceptor in Slavic Languages and Literatures
Michael S. Flier, Oleksandr Potebnja Professor of Ukrainian Philology
George G. Grabowicz, Dmytro Cyzevs’kyj Professor of Ukrainian Literature
Nora Hampl, Preceptor in Slavic Languages and Literatures
John E. Malmstad, Samuel Hazzard Cross Professor of Slavic Languages and Literatures *(on leave spring term)*
Joanna Nizynska, Associate Professor of Slavic Languages and Literatures *(Director of Undergraduate Studies)*
Natalia Pokrovsky, Preceptor in Slavic Languages and Literatures
Natalia Reed, Preceptor in Slavic Languages and Literatures
Stephanie Sandler, Ernest E. Monrad Professor of Slavic Languages and Literatures *(Director of Graduate Studies)*
Farida Tcherkassova, College Fellow in the Department of Slavic Languages and Literatures
William Mills Todd III, Harry Tuchman Levin Professor of Literature and Professor of Comparative Literature
Justin Weir, Professor of Slavic Languages and Literatures and of Comparative Literature *(on leave 2012-13)*

*Other Faculty Offering Instruction in the Department of Slavic Languages and Literatures*

*Language Courses*

*For Undergraduates and Graduates*

*Sectioning Note:* Sectioning in multisectioned language courses is determined by attendance in class during the first week and through subsequent adjustments to maintain uniform section size. There is no separate sectioning meeting for language courses. Beginning on the first day of class, sections fill on a first-come basis, so that some sections may close on the first day. Students should attend the section of their choice and must continue to attend throughout the first week (or make special arrangements) to retain their places in sections. Students who miss classes may enter only those sections where space is available. Please note that under-enrolled sections may be canceled or rescheduled. No section times are guaranteed. As a general rule, no auditors are permitted in language courses. If fellowship terms or other circumstances prohibit registration, students must speak with the Director of the Language Program to request permission to audit. Language courses may not be taken Pass/Fail. Some courses permit graduate students to register on a Pass/Fail basis, but only by permission of the instructor. For further information on the Slavic Department, please go to www.slavic.fas.harvard.edu.

*Slavic A. Beginning Russian*
Catalog Number: 8014
*Steven Clancy, Natalia Chirkov, and others*
*Full course. Fall: Section I: M., through W., F., at 9; Section II: M., through W., F., at 10; and speaking practice Th., 10, 11, I or 2; Spring: Section I: M., W., through F., at 9; Section II: M., W., through F., at 10; and speaking practice Tu., 10, 11, I or 2. EXAM GROUP: 2, 11*
Introduction to the essentials of the Russian language, designed for students without previous knowledge of Russian. Intensive speaking practice in essential grammar and vocabulary using naturally occurring conversational patterns. Introduction to the speech etiquette of social exchanges. Regular use of online video for comprehension practice, grammar, and vocabulary
building. Reading and discussion of stories, biography, and poetry.  
Note: See sectioning note above.

**Slavic Aa. Beginning Russian through Pushkin - (New Course)**  
Catalog Number: 39963  
*Farida Tcherkassova and Natalia Reed*  
*Full course (indivisible). M., W., F., at 9, with speaking and reading practice Tu., Th., at 9 or 10.*  
**EXAM GROUP: 2**

Introductory course to Russian language and culture through a selection from the verse and prose works of Russia’s greatest poet, Alexander Pushkin. Covers all of the basics of Russian grammar, including all six cases, verbal conjugation, and verbs of motion. Strong emphasis on reading, but attention is given to all skills including speaking, writing, and listening to Russian.  
*Note: Assumes no previous knowledge of Russian. Both Slavic A and Slavic Aa prepare students to continue in Slavic B.*

**Slavic Aab. Beginning Russian (Intensive)**  
Catalog Number: 4441  
*Natalia Chirkov and others*  
*Full course (fall term; repeated spring term). M., through F., at 9, and speaking practice M., W., F., at 10 or 11. EXAM GROUP: 2, 11*  
Covers the same material as Slavic A but in one term.  
*Note: See sectioning note above.*

**Slavic Ac (formerly Slavic Acd). Grammar and Vocabulary Review for Heritage Speakers**  
Catalog Number: 0496  
*Steven Clancy*  
*Half course (spring term). M., W., F., at 1, and an additional hour of speaking practice to be arranged. EXAM GROUP: 6*  
For students with Russian family background. The course covers all of the cases of Russian verb conjugation, aspect, and other essential grammar topics. Emphasis on reading, writing, spelling, and word formation.

**Slavic B. Intermediate Russian**  
Catalog Number: 3262  
*Natalia Reed and others*  
*Full course. M., W., F., at 9; with speaking practice Tu., Th., at 9, 10, or 11.*  
Major emphasis on the development of vocabulary and oral expression with continuing work on difficult grammar topics. Vocabulary thematically organized to include such topics as self and family, education, work, human relationships, politics, and national attitudes. Includes practice in the etiquette of common social situations. Vocabulary reinforced through film and the reading of classical and contemporary fiction and history. Computer exercises on selected topics.  
*Note: See sectioning note above.*  
*Prerequisite: Slavic A, Aab, Ac, or placement at the intermediate level. Familiarity with fundamentals of Russian grammar, particularly case endings of the noun, pronoun, and adjective. One year’s practice in spoken Russian.*
Slavic Bab. Intermediate Russian (Intensive)
Catalog Number: 1657
Steven Clancy, Natalia Chirkov, and others
Full course (spring term). M. through F., at 9; and speaking practice M., W., F., at 1. EXAM GROUP: 2, 11
Covers essentially the same material as Slavic B, but in one term. Readings may vary.
Note: See sectioning note above. Class hours may be changed by agreement.
Prerequisite: Slavic A, Aab, Ac, or placement at the intermediate level.

Slavic Ca. Beginning Czech I
Catalog Number: 2173
Nora Hampl
Half course (fall term). M., W., F., at 10, and an additional hour of speaking practice to be arranged. EXAM GROUP: 3
An introductory course in modern Czech for students with no previous knowledge of the language. Emphasis on the development of oral proficiency as well as on reading and listening comprehension skills. Written work for practice and reinforcement. Reading of simple poetry and prose.

Slavic Cb. Beginning Czech II
Catalog Number: 7117
Nora Hampl
Half course (spring term). M., W., F., at 10, and an additional hour of speaking practice to be arranged. EXAM GROUP: 3
Continuation of modern Czech grammar and the further development of reading, writing, and oral skills. Reading and discussion of simple literary texts by Hasek, Capek, Havel, and Kundera.

Slavic Cc. Intermediate Czech I
Catalog Number: 6028
Nora Hampl
Half course (fall term). M., W., F., at 11, and a speaking practice to be arranged. EXAM GROUP: 4
Intermediate language and culture study combines further development of vocabulary and oral expression with a comprehensive review of Czech grammar. Vocabulary topics are thematically organized and reinforced through visual media to include cultural perceptions of the self, family, society, and broader ethical and political attitudes prevalent in Czech culture. Selected short texts, movies, and multi-media will familiarize students with contemporary cultural issues and historical and political developments.
Prerequisite: Slavic Ca and Cb or placement at this level.

Slavic Cd. Intermediate Czech II
Catalog Number: 7411
Nora Hampl
Half course (spring term). M., W., F., at 11, and speaking practice to be arranged.
Second-semester intermediate study consolidates and expands grammar/lexicon, reading, writing and speaking skills in Czech. Grammar review is combined with intensive vocabulary building.
around literary and film masterpieces. Original literature to include Capek, Havel, Kundera and others, as well as newspaper articles and newscasts, with the objective of further interpreting cultural categories encoded in the language. 

Prerequisite: Slavic Ca, Cb, Cc, or placement at this level.

*Slavic Cr. Supervised Readings in Intermediate/Advanced Czech
Catalog Number: 0847
Nora Hampl
Half course (fall term; repeated spring term). Hours to be arranged.
Emphasis on reading with some practice in speaking and writing. Conducted as a tutorial.
Note: Department application required. No applications accepted after the third day of classes. Interested students should submit on-line applications to staff assistant at slavic@fas.harvard.edu, preferably by the second day of classes. Applications may be found on the department website under Resources.

Slavic Da. Beginning Polish I
Catalog Number: 8158
Anna Baranczak
Half course (fall term). M., W., F., at 9, and an additional hour of speaking practice to be arranged. EXAM GROUP: 2
Introduction to the fundamentals of Polish designed for students with no previous knowledge of the language. Emphasis on oral practice of essential grammar structures in naturally occurring conversational patterns. Reading and discussion of simple prose and/or poetry.

Slavic Db. Beginning Polish II
Catalog Number: 6907
Anna Baranczak
Half course (spring term). M., W., F., at 9, and an additional hour of speaking practice to be arranged. EXAM GROUP: 2
Continuation of Slavic Da. Continued work on Polish grammar with increasing emphasis on reading. Continued oral work and writing for practice and reinforcement.

Slavic Dc. Intermediate Polish I
Catalog Number: 41571
Anna Baranczak
Half course (fall term). M., W., F., at 11, and speaking practice to be arranged. EXAM GROUP: 4
Emphasis on vocabulary building, writing, speaking and listening skills with comprehensive review of Polish grammar concentrating on difficult topics. Introduction to Polish literature through fiction and poetry, history and contemporary events.
Prerequisite: Slavic Da and Db or placement at this level.

Slavic Dd. Intermediate Polish II
Catalog Number: 56678
Anna Baranczak
Half course (spring term). M., W., F., at 11, and speaking practice to be arranged. EXAM
GROUP: 4
Intensive development of vocabulary and oral skills. Readings from literary masterpieces from Polish literature from the era of Renaissance to our times including Jan Kochanowski, Wislawa Szymborska, Zbigniew Herbert, Czeslaw Milosz and others. Film clips and newspaper articles will introduce students to a variety of styles of contemporary Polish.
Prerequisite: Slavic Dc or placement at this level.

*Slavic Dr. Supervised Readings in Intermediate/Advanced Polish
Catalog Number: 1096
Anna Baranczak
Half course (fall term; repeated spring term). Hours to be arranged.
Emphasis on reading with some practice in speaking and writing. Conducted as a tutorial.
Note: Department application required. No applications accepted after the third day of classes. Interested students should submit on-line applications to staff assistant at slavic@fas.harvard.edu, preferably by the second day of classes. Applications may be found on the department website under Resources.

Slavic Ga. Beginning Ukrainian I
Catalog Number: 5536
Volodymyr Dibrova
Half course (fall term). M., W., F., at 9, and an additional hour of speaking practice to be arranged. EXAM GROUP: 2
Introduction to the fundamentals of Ukrainian designed for students with no previous knowledge of the language. Emphasis on oral practice of essential grammar structures in naturally occurring conversational patterns. Reading and discussion of simple prose and/or poetry. Writing for practice and reinforcement.

Slavic Gb. Beginning Ukrainian II
Catalog Number: 7126
Volodymyr Dibrova
Half course (spring term). M., W., F., at 9, and an additional hour of speaking practice to be arranged. EXAM GROUP: 2
Continuation of Slavic Ga. Continued work on Ukrainian grammar with further development of vocabulary, oral expression and comprehension. Readings of short stories and poems with discussion of texts in Ukrainian.

*Slavic Gr. Supervised Readings in Intermediate/Advanced Ukrainian
Catalog Number: 1260
Volodymyr Dibrova
Half course (fall term; repeated spring term). Hours to be arranged.
Emphasis on reading with some practice in speaking and writing. Conducted as a tutorial.
Note: Department application required. No applications accepted after the third day of classes. Interested students should submit on-line applications to staff assistant at slavic@fas.harvard.edu, preferably by the second day of classes. Applications may be found on the department website under Resources.
**Slavic 101. Advanced Intermediate Russian: Reading, Grammar Review, and Conversation**
Catalog Number: 7234
* Natalia Pokrovsky and others

*Half course (fall term). M., W., F., at 1, and speaking practice Tu., Th., at 1 or 2. EXAM GROUP: 6*
Continuing development of speaking and reading proficiency. Vocabulary work emphasizes verbs and verb government as essential to effective communication. Work on word formation to increase reading vocabulary. Texts for reading and discussion include works in prose, poetry, and film. Readings include a satirical tale by Shvartz, poetry of Akhmatova, and a film (Bykov’s Scarecrow).
*Note: See sectioning note above.*
*Prerequisite:* Slavic B, Bab, Bb, or placement at this level.

**Slavic 102r. Advanced Russian: Introduction to the Language of History and the Media**
Catalog Number: 3280
* Steven Clancy

*Half course (fall term). M., W., F., at 2-4. EXAM GROUP: 7, 8*
Introduction to the language of Russian newspapers, journals, and historical writing. Basic vocabulary for such areas as current events, including politics, history, economics, military issues, society, and the environment. Intended for students who desire a professional level of reading proficiency in the social sciences. Intensive work on morphology and supplementary work on oral comprehension.
*Note: See sectioning note above. Conducted largely in English.*
*Prerequisite:* Slavic 101 or permission of instructor.

**Slavic 103. Advanced Russian: Reading, Composition, and Conversation**
Catalog Number: 8638
* Natalia Reed and others

*Half course (spring term). M., W., F., at 9, with a speaking section Tu., Th., at 1 or 2. EXAM GROUP: 2*
Continuing work on vocabulary and grammar centering on verbs and verb government. Readings include works by Chekhov and Dostoevsky, poetry, and film.
*Note: See sectioning note above. Strongly recommended for students who plan to continue in Russian.*
*Prerequisite:* Slavic 101 or placement at the 103 level.

**Slavic 111. Advanced Russian: Readings in Russian/Post-Soviet Studies**
Catalog Number: 1594
* Natalia Pokrovsky

*Half course (fall term). M., W., F., at 10. EXAM GROUP: 3*
Reading and discussion of topics in the areas of history, economics, politics, and current events. Continued work on grammar and vocabulary with written exercises and compositions. TV viewing for comprehension development.
*Note: See sectioning note above.*
*Prerequisite:* Slavic 101 and 102, Slavic 103, or placement at the level of Slavic 111/113.
*Slavic 112. Advanced Russian: Russian Press and Television
Catalog Number: 3290
Natalia Pokrovsky
Half course (spring term). M., W., F., at 1, with an additional hour of TV viewing F., at 2. EXAM GROUP: 6
For students who already have experience reading Russian periodicals. Readings in and analysis of current topics and their presentation in the Russian press. Examination of the history of selected periodicals. Viewing of Russian news programs and analysis of language and content. Class conducted largely in Russian.
Note: See sectioning note above.
Prerequisite: Slavic 102 and an additional course at the level of Slavic 101 or above, or Slavic 111 with permission of the instructor.

Slavic 113. Advanced Russian: Readings in Russian Literature I
Catalog Number: 0955
Natalia Pokrovsky
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
Reading and discussion of classic and contemporary Russian literature. Continued work on vocabulary expansion and composition. Written exercises for reinforcement. Readings from authors such as Gogol, Chekhov, Bulgakov, Pasternak, Brodsky, and Bitov.
Note: See sectioning note above.
Prerequisite: Slavic 103, 115 or placement at this level or above.

Slavic 115 (formerly Slavic 104). Advanced Russian: Russian Cultural Self-Images and National "Mentality"
Catalog Number: 0795
Natalia Pokrovsky
Half course (spring term). M., W., F., at 11; M., W., F., at 10. EXAM GROUP: 4
Through readings and film, we explore Russian cultural attitudes and self-images as socio-cultural context. Topics include cultural perceptions of self as nation and as cultural "mentality," the collective vs. the individual, attitudes toward friendship, the family and women, law, crime, prestige and success, and ethnic difference. Concentrates on vocabulary and phrasing, and includes extensive writing practice.
Prerequisite: Slavic 103, 113, or permission of instructor.

*Slavic 120r. Supervised Readings in Advanced Russian
Catalog Number: 7121
Steven Clancy
Half course (fall term; repeated spring term). Hours to be arranged.
Intended for students who have already taken other department offerings. Reading, discussion, and writing on special topics not addressed in other courses. Conducted as a tutorial. Requires a course proposal to apply; acceptance is not automatic. Applications may be found on the department website under Resources.
Note: See sectioning note above. No applications accepted after the third day of classes.

Slavic Literature, Culture, and Philology
Primarily for Undergraduates

*Slavic 91r. Supervised Reading and Research
Catalog Number: 2713
Joanna Nizynska and others
Half course (fall term; repeated spring term). Hours to be arranged.
Note: A graded course. Permission must be obtained from the Director of Undergraduate Studies and the instructor under whom the student wishes to study.

*Slavic 97. Tutorial — Sophomore Year
Catalog Number: 7595
Jonathan H. Bolton
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
An interdisciplinary introduction to major authors and themes of Slavic history and literature, focusing on relationships between literature, power, history, and myth. Theories of literary interpretation (including Russian Formalism and semiotics) as well as different approaches to placing literature in its social and political contexts. Readings introduce students to major figures in the Slavic literary traditions, including Pushkin, Dostoevsky, Tolstoy, Chekhov, Platonov, Kundera, Hrabal, and others.
Note: For concentrators in Slavic Literatures and Cultures. Open to non-concentrators provided they contact the instructor before the beginning of the semester.

*Slavic 98. Tutorial—Junior Year
Catalog Number: 1684
William Mills Todd III (fall term) and Stephanie Sandler (spring term)
Full course. Th., 2–4. EXAM GROUP: 16, 17
Fall term introduces students to Gogol’s short fiction, read in the original, and explores a range of interpretive approaches. Spring term is devoted to a single topic and provides concentrators with a more intensive reading experience. This year’s focus is on Pushkin’s novel-in-verse Eugene Onegin, a truly seminal work that we will read in the original.
Note: Required of junior concentrators in Slavic Literatures and Cultures. Other students may enroll for one or both terms. Students who wish to concentrate on a different Slavic language may arrange a separate tutorial.

*Slavic 99a (formerly *Slavic 99r). Tutorial—Senior Year
Catalog Number: 9278
Joanna Nizynska and others
Half course (fall term; repeated spring term). Hours to be arranged.
For senior concentrators in Slavic Literature and Culture. Students work with a faculty advisor on a senior thesis or capstone project.
Note: Required for senior concentrators in Slavic Literature and Culture. Students who wish to enroll must obtain the signature of the Director of Undergraduate Studies. Honors students must also complete Slavic 99b.

*Slavic 99b. Tutorial — Senior Year
Catalog Number: 5592
Joanna Nizynska and others
Half course (spring term). Hours to be arranged.
Students work with a faculty adviser on a senior thesis.
Note: For senior concentrators in Slavic Literature and Culture. Students who wish to enroll must obtain the signature of the Director of Undergraduate Studies.
Prerequisite: Slavic 99a.

Cross-listed Courses

Aesthetic and Interpretive Understanding 11. Poetry Without Borders
Aesthetic and Interpretive Understanding 34. Interpretation: Artful Reading of Page, Stage, and Screen
Aesthetic and Interpretive Understanding 41 (formerly Literature and Arts C-30). How and What Russia Learned to Read: The Rise of Russian Literary Culture
[Aesthetic and Interpretive Understanding 45 (formerly Foreign Cultures 72). Art and Politics in Russia and Eastern Europe]
Culture and Belief 38 (formerly Literature and Arts C-28). Apocalypse Then! Forging the Culture of Medieval Rus’
Culture and Belief 42 (formerly Foreign Cultures 92). Communism and the Politics of Culture: Czechoslovakia from the Prague Spring to the Velvet Revolution
[Ethical Reasoning 28. Moral Inquiry in the Novels of Tolstoy and Dostoevsky]
*Freshman Seminar 30l. George Balanchine: Russian-American Master
*Freshman Seminar 34t. Experimental Fiction
*Freshman Seminar 38l. Introduction to Literary Theory and Cultural Studies, or How To Read Like a College Professor
[History 72c. The Life and Reign of Catherine the Great]
*History 82f. The Origins of the Cold War: The Yalta Conference (1945)
[History 82n. Mapping History] - (New Course)

For Undergraduates and Graduates

[Slavic 125. Modern Russian in Historical Perspective]
Catalog Number: 5646
Michael S. Flier
Half course (spring term). Tu., Th., at 1. EXAM GROUP: 15
Analysis of apparent exceptions and oddities in the phonology, morphology, and syntax of contemporary Russian through the prism of historical changes and developments.
Note: Expected to be given in 2013–14.
Prerequisite: Slavic B, Bab, or placement at the third-year level.

[Slavic 126a. Structure of Modern Russian: Phonology and Morphology]
Catalog Number: 3083
Michael S. Flier
Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13
Introduction to Russian phonetics, phonemics, morphophonemics, and inflectional and derivational morphology. Course goal is to give a deeper understanding and appreciation of the
regularities and complexities of Russian through a close study of its sounds and words.  
**Note:** Expected to be given in 2013–14.  
**Prerequisite:** Slavic B, Bab or placement at the third-year level. No knowledge of linguistics required.

**[Slavic 137. Prague Between Two Empires: Czech Culture from 1914 to 1948]**  
Catalog Number: 9805  
Jonathan H. Bolton  
*Half course (fall term). M., W., (F.), at 12. EXAM GROUP: 5*  
Introduction to Czech culture (literature, journalism, film) between the world wars, focusing on the interwar renaissance and Nazi occupation from 1939 to 1945. Examines how writers negotiated between the demands of aesthetics and politics, articulating a Czechoslovak identity while participating in the main currents of European modernism, from dadaism and expressionism through surrealism and existentialism. Readings include Kafka, Hasek, Capek, Olbracht, Seifert, Nezval, Jiri Langer, and others.  
**Note:** Expected to be given in 2013–14. All readings in English. No prior knowledge of Czech literature or history necessary. Students who wish to read Czech texts in the original may arrange a special section with the instructor.

**[Slavic 141. Russian Drama and Performance - (New Course)]**  
Catalog Number: 56433  
Julie A. Buckler  
*Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17*  
Survey of drama, opera, ballet, film, musicals, and performance art in imperial, Soviet, and contemporary Russian culture. What is distinctive about the Russian tradition in performing arts? How has this tradition renewed itself with the changing times? How have these works been interpreted and performed outside of Russia?  
**Note:** All readings in English. No prior knowledge of Russian literature or history necessary. Students who wish to read Russian texts in the original may arrange a special section with the instructor.

**[Slavic 143. Russian Formalism]**  
Catalog Number: 22157  
Justin Weir  
*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*  
Considers works of Russian formalist theory by Bakhtin, Eikenbaum, Jakobson, Shklovsky, Tynianov, and others and their relationship to Russian literature, film, and psychology. Also evaluates more broadly the role of formalist influences in contemporary literary theory.  
**Note:** Expected to be given in 2014–15. All readings in English.

**[Slavic 145 (formerly 145a). Russian Literature in Translation: The 19th-Century Tradition]**  
Catalog Number: 5191  
*Half course (fall term). M., W., at 10. EXAM GROUP: 3*  
A survey of major works of fiction from Pushkin through Dostoevsky, Tolstoy, and Chekhov.
Key themes include Russia’s encounter with East and West; urban and rural life; the writer and the state; generational conflict and continuity; religion and science; reform and radicalism; and the collapse of empire. Primary materials are supplemented by readings in cultural and intellectual history.

*Note:* Expected to be given in 2013–14. All readings in English.

**[Slavic 146 (formerly Slavic 145b). Russian Literature and Revolution]**
Catalog Number: 6663

*Half course (spring term). M., W., at 12. EXAM GROUP: 5*
Examines 20th-century Russian literature and its attempts to inspire, record, and undermine the social upheaval of 1917. Themes include revolution, utopianism, self-creation, repression, war, nationalism, everyday life, non-conformism, emigration, reform, and memory. Considers a range of literary genres and movements and the sanctioned aesthetics of socialist realism.

*Note:* Expected to be given in 2013–14. All readings in English.

**[Slavic 148. Strange Russian Writers]**
Catalog Number: 7101
Stephanie Sandler

*Half course (spring term). Tu., Th., at 11. EXAM GROUP: 13*
Studies Russia’s rebels, deviants, martyrs, loners, and losers as emblems of national identity. Stories, films and poems that project Russia’s distinctive obsessions with history and religion. Includes Gogol, Tolstoy, Leskov, Kharms, Platonov, Nabokov, Sinyavsky, Petrushevskaya, Prigov; films by Eisenstein, Tarkovsky, Muratova, Lungin, Sokurov.

*Note:* Expected to be given in 2013–14. All readings in English. Separate additional section for those able to read texts in Russian. This course, when taken for a letter grade, meets the General Education requirement for either Aesthetic and Interpretive Understanding or Culture and Belief, but not both. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts C. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

**[Slavic 149. Performance, Theater, Culture, Nation, Self: Russia and Its Others]**
Catalog Number: 36747
Julie A. Buckler

*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*
Investigates performance and theatricality in imperial, Soviet, and post-Soviet contexts, in both art and life, through broad exploration of theoretical underpinnings (classical dramatic theory to contemporary performance studies) and case studies from drama, opera, ballet, film, musicals, performance art, religious ritual and folk festival, monarchy and court, mass spectacles, Cold War competitions and diplomacy, subcultures, and contemporary assertions of new orders.

*Note:* Expected to be given in 2013–14. Reading knowledge of Russian desirable, but not required. An additional weekly session will be conducted for those who wish to consider texts in the original. Open to reasonably advanced undergraduates and graduates.

**Slavic 150. Moscow and St. Petersburg**
Catalog Number: 7644
Julie A. Buckler  
*Half course (spring term). M., 1–3. EXAM GROUP: 6, 7*
Explores the literary and cultural histories of Russia’s two capital cities, their "urban geographies" and representations in visual and performing arts. Includes Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Bely, Zamyatin, Bunin, Bulgakov, Nabokov, Erofeev, Bitov, Tolstaya, Pelevin, Sokurov, Balabanov, Bekmambetov.
*Note:* All readings in English. No prior knowledge of Russian literature or history necessary. Students who wish to read Russian texts in the original may arrange a special section with the instructor.

**[Slavic 151. Experiments in Reading: Chekhov and Nabokov]**
Catalog Number: 2505
Svetlana Boym  
*Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17*
Literary close reading of Chekhov and Nabokov with special attention to narrative experimentation as well as to the cultural and historical contexts. The main reading is Nabokov’s *Drugie berega/Speak Memory*, a text that combines fiction and autobiography, literature and criticism, English and Russian.
**Prerequisite:** Reading knowledge of Russian.

**[Slavic 152. Pushkin]**
Catalog Number: 8023
William Mills Todd III  
*Half course (spring term). W., 2–4. EXAM GROUP: 7, 8*
A survey of the lyrics, narrative poems, fiction, and critical prose of Russia’s “national poet.” Close reading of the texts; attention to contemporary cultural issues. Lecture and discussion.  
*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts A.  
**Prerequisite:** Good reading knowledge of Russian.

**Slavic 155. Dostoevsky**
Catalog Number: 6850 Enrollment: Limited to 20.
William Mills Todd III  
*Half course (fall term). M., 1-3. EXAM GROUP: 6, 7*
Reading of Dostoevsky’s major works, with a view to showing how the problems they contain (social, psychological, political, metaphysical) are inseparable not only from his time but from the distinctive novelistic form he created.  
*Note:* No knowledge of Russian required.

**Slavic 156. Vladimir Nabokov: A Cross-Cultural Perspective**
Catalog Number: 8650
Svetlana Boym  
*Half course (spring term). W., 3–5. EXAM GROUP: 8, 9*
Examines Nabokov’s poetry, fiction, film scripts, and essays from Russian, European and
American periods. Attention to issues of literary modernism, cultural translation and memory. Additional readings from Chekhov, Proust, Bergson, Borges, and others.

**Slavic 157. Some Versions of Russian Pastoral - (New Course)**
Catalog Number: 99049
William Mills Todd III
*Half course (spring term). M., 4–6. EXAM GROUP: 9*
Readings of 18th- through 20th-century Russian literature, including prose and verse by Karamzin, Pushkin, Sergei Aksakov, Goncharov, Turgenev, Saltykov-Shchedrin, Tolstoy, and Gorky. Discussion focuses on contemporary cultural contexts and on theoretical issues. *Note: No knowledge of Russian required.*

**[Slavic 158. Women/Poets]**
Catalog Number: 3895
Joanna Nizynska and Stephanie Sandler
*Half course (spring term). Hours to be arranged.*
How have twentieth-century women changed poetry? How have they found new readers? Concentrates on Russian, Polish, and American poets, among them Akhmatova, Tsvetaeva, Shvarts, Lipska, Kamienska, Szymborska, Plath, Graham, Dove, Howe, Guest. Explores their acts of self-fashioning and linguistic performance, and the forms of staged reticence and resistance in their work. Attention to feminist and other theory, with an emphasis on connections among national cultures. *Note: Expected to be given in 2013–14. All texts available in English translation.*

**Slavic 166. Russian-Ukrainian Literary Relations in the 19th Century: Conference Course**
Catalog Number: 3513
George G. Grabowicz
*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*
Examines Russian-Ukrainian literary relations from 1798 to 1905, with special focus on canon formation, ethnic, national and imperial identity, and the interrelation of literature, society, and ideology. Topics include Decembrist historicism, Romantic poetics and folklore, Slavophilism and populism, literature as subversion (kotljarevshchyna), the uses of translation, the reception of major writers (Gogol, Shevchenko, and others), and the imperial attempt to suppress “Ukrainophilism.” *Prerequisite: Reading knowledge of Russian or Ukrainian.*

Catalog Number: 4126
George G. Grabowicz and Halyna Hryn
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*
Examines main currents in Ukrainian intellectual and cultural expression from the eve of the Russian Revolution, through the formation and dissolution of the USSR, to the "Orange Revolution" (2004). Topics include populism vs. modernism, nationalism vs. socialism, Literary Discussion of the 1920s, Stalinism, Glasnost, linguistic, and national identity. Focus on literature, film (Dovzhenko, Paradzhanov, Illienko), and theater (Kurbas); guest lectures on
music and art.

[Slavic 171. Writing Women in Post-1989 Poland]
Catalog Number: 31395
Joanna Nizynska
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
Post-communist Polish literature has been dominated by female writers engaging in examinations and reconfigurations of female identity in a culture searching for self-definition. Their representations of gender and sexuality in Polish-style patriarchy offer an important test case of "glocalization"--or the adaptation of Western theory for local needs. From the cult novels of Maslowska to the groundbreaking essays of Brach-Czajna to the controversial poetry of Keff, this course investigates women writers’ shifting self-portraits.
Note: Expected to be given in 2013–14.
Prerequisite: Reading knowledge of Polish.

[Slavic 173. Polish Romanticism]
Catalog Number: 2240
George G. Grabowicz
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Overview of the major artistic and intellectual trends and close reading of key works by the major writers: Malczewski, Mickiewicz, Slowacki, Krasinski, and others. Focus also on the central role of Romanticism in Polish culture.
Note: Expected to be given in 2013–14.
Prerequisite: Reading knowledge of Polish.

[Slavic 176. Between Avant-Garde and Catastrophism: The Interwar Period in Polish Literature]
Catalog Number: 9878
Joanna Nizynska
Half course (spring term). W., 3–5; F., 2–4. EXAM GROUP: 8, 9
This survey of the varied manifestations of modernism in independent Poland between the wars also investigates the artistic and ideological tension between the international and the local in the activities (including visual arts) of the First and Second Vanguard, Futurism, Skamander, and other movements. Readings include prose, poetry, drama by Gombrowicz, Schulz, Witkacy, Tuwim, Przybos, and others.
Note: All readings in English.

[Slavic 177. Polish Literature After 1989: the Arrival of the Others]
Catalog Number: 66961
Joanna Nizynska
Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
With the fall of Communism, Polish communal identity suffered a traumatic breakdown. This course investigates the emergence and treatment of otherness in Polish literature from 1989 to the present, discussing the forms of nostalgia and aggression that arise when a culture responds to new forms of otherness: ethnic (e.g., Jewish and German), gender and sexuality (feminism and
queer), social and generational groups (e.g., the post-communist "McDonalds generation"). Readings from Chwin, Huelle, Maslowska, Stasiuk, Tryzna, Tulli.

Note: Expected to be given in 2013–14. All readings in English.

[Slavic 178 (formerly Literature 178). Trauma and Postmemory: Collective Identity and Unexperienced Loss: Conference Course]
Catalog Number: 9125
Joanna Nizynska
Half course (spring term). Tu., 12–2. EXAM GROUP: 14, 15
How do literature and film convey traumatic experiences long after they have occurred? How does posttraumatic syndrome affect the formation of personal and collective memory? What is postmemory in a cultural sense, and how does it compensate for historical loss? Using contemporary Polish literature and film as case studies (e.g., Chwin, Huelle, Kieslowski, Polanski, Szczypiorski), we will discuss the transposition of traumatic memory into postmemorial narratives, and the transgenerational transmission of the traumatic.
Note: Expected to be given in 2013–14. All readings in English translation. All films subtitled. Additional weekly session available for students reading Polish.

Slavic 179. Bialoszewski: The Art of Private Life
Catalog Number: 14628
Joanna Nizynska
Half course (fall term). Th., 11:30–1:30. EXAM GROUP: 13, 14, 15
How do traumatic experiences affect literary modes for representing the everyday? What critical approaches are most productive for approaching such works? Explore the unique aesthetic strategies of Miron Bialoszewski, whose attention to insignificant quotidian events makes him the most “private” writer in historically and politically oriented postwar Polish literature. Theoretical readings frame discussions on the everyday, trauma, and queer studies.
Note: Readings from Bialoszewski in Polish, discussions in English.
Prerequisite: Reading knowledge of Polish.

[Slavic 180. Russian Symbolist Poetry]
Catalog Number: 6333
John E. Malmstad
Half course (fall term). M., 3–5. EXAM GROUP: 8, 9
A survey of the history of the Symbolist movement in Russia with emphasis on close reading of poetry by its major figures.
Note: Expected to be given in 2013–14.
Prerequisite: Slavic 101 or an equivalent acceptable to instructor.

Slavic 181. Russian Poetry of the 19th Century
Catalog Number: 3307
John E. Malmstad
The major themes and modes of Russian poetry from pre-Romanticism to “pure art.” Selections from Zhukovsky, Batiushkov, Baratynsky, Yazykov, Lermontov, Tiutchev, Nekrasov, Fet, and
others.

Prerequisite: Slavic 101 or an equivalent acceptable to instructor.

[Slavic 186. Poetry after Brodsky: How Russian Is It?]
Catalog Number: 9918
Stephanie Sandler
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Note: Expected to be given in 2013–14. Open to qualified undergraduates with good reading knowledge of Russian.

[Slavic 195. Myths of Central Europe after World War II: Conference Course]
Catalog Number: 4701
Jonathan H. Bolton
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
For Milan Kundera, Central Europe was the kidnapped conscience of the West; for György Konrád it was “a subversive dream,” for Josef Kroutvor a “melancholy grotesque.” Considers major authors (Kundera, Havel, Hrabal, Kiš, Milosz, Herling-Grudzinski, Márai, Albahari) and key motifs and situations (occupation, resistance, and collaboration; interrogation, censorship, and dissent; emigration and exile; "anti-politics") that have defined a "Central European" literature and identity in Austria, Czechoslovakia, Poland, Hungary, and Yugoslavia since World War II.
Note: Expected to be given in 2013–14. All readings in English.

[Slavic 198. Encounters of Memory and History]
Catalog Number: 65896
Jonathan H. Bolton
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
How do historical events such as invasion, war, and revolution distort the shape of people’s life-stories? What narrative forms do authors use to project a private life against a historical backdrop? How can memoirs and diaries sustain a sense of agency against the public interventions of politics and History? Readings from narrative and autobiographical theory, as well as memoirs and first-person novels by Milosz, Herling-Grudzinski, Hrabal, Sebald, Perec, Bolaño, Kiš, Hemon, Philip Roth and others.
Note: Expected to be given in 2013–14. All readings in English.

Cross-listed Courses

[History 1266. Central Europe, 1789-1918: Empires, Nations, States]
History 1270. Frontiers of Europe: Ukraine since 1500
History 1290. The History of the Russian Empire
[History 1970. Cold War Summits: Conference Course]
**Linguistics 101. The Science of Language: An Introduction**  
[Literature 160 (formerly Comparative Literature 160). Literary Forgeries and Mystifications]  
**Literature 164. The 20th-Century Post-Realist Novel in Eastern Europe: Conference Course**  
**Visual and Environmental Studies 184. Imagining the City: Literature, Film, and the Arts**  
[Visual and Environmental Studies 188s. Soviet and Russian Film and Film Theory]

**Primarily for Graduates**

**Slavic 201. Introduction to East Slavic Languages**  
Catalog Number: 5134  
*Michael S. Flier*  
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*  
Introduction to the structure and history of Russian, Ukrainian, and Belarusian.  
*Prerequisite: Linguistics 250.*

**Slavic 222. 20th-Century Ukrainian Poetry**  
Catalog Number: 2638  
*George G. Grabowicz*  
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*  
A survey of the major poets and movements: Tychyna, the neo-classicists, Bazhan, the futurists, the Prague group, Antonych, Svidzins’kyj, émigré poetry, the New York group, late Soviet and post-Soviet poetry.  
*Note: Expected to be given in 2013–14.*  
*Prerequisite: Reading knowledge of Ukrainian.*

**Slavic 231. Czech Literary Culture, 1900-1945**  
Catalog Number: 46473  
*Jonathan H. Bolton*  
*Half course (fall term). M., W., at 11. EXAM GROUP: 4*  
Close reading of major works of poetry and prose in the original Czech, with attention to the larger cultural currents of Central European modernism. Authors include Vančura, Olbracht, Halas, Blatný, Orten, Čapek, Hašek, and others.  
*Note: Expected to be given in 2013–14.*  
*Prerequisite: Good reading knowledge of Czech.*

**Slavic 240. Soviet Cinema and the Bolshevik Revolution: Seminar**  
Catalog Number: 52215  
*Justin Weir*  
*Half course (spring term). Tu., 2-4, with a film screening Tu., 4-6. EXAM GROUP: 16, 17*  
Considers cinematic anticipations and responses to the Bolshevik Revolution in the films of Kuleshov, Dovzhenko, Vertov, Eisenstein, Pudovkin and others. Pays special attention to montage theory, the role of documentary, Russian Formalist film theory, and repression of filmmakers during Stalinism.
Note: Expected to be given in 2013–14. All course materials available in English translation. Advanced undergraduates may be admitted with permission of instructor.

[Slavic 251. Reading Anna Karenina]
Catalog Number: 43465
Julie A. Buckler
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Close reading of Anna Karenina in original Russian with exploration of cultural context, artistic biography, tradition of nineteenth-century psychological novel, reception and interpretive paradigms, potential for new ways of reading.
Note: Expected to be given in 2013–14. Reading will be done primarily in the original Russian. Advanced undergraduates may be admitted with permission of instructor.

[Slavic 280r. Slavic Culture: Seminar]
Catalog Number: 1909
Michael S. Flier
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
Note: Expected to be given in 2013–14.

Slavic 281. Literature, Film, and Visual Arts in Russia, 1920-1930
Catalog Number: 1058
Svetlana Boym
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Examines poetry, prose and visual arts together with cultural theory. Explores issues of innovation and cultural memory, art and politics, bilingualism and exile. Works by Mayakovsky, Malevich, Mandelshtam, Tsvetaeva, Babel, Shklovsky, Nabokov, Vertov, and Eisenstein.
Note: Most texts available in English. Open to qualified undergraduates.
Prerequisite: Reading knowledge of Russian.

[Slavic 282. Literature, Film, and Visual Art in Contemporary Russia]
Catalog Number: 1286
Svetlana Boym
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Examines Russian culture from socialist realism to postcommunism. Topics: Socialist realist film, literature of the Gulag, writers’ trials, non-conformist art and rethinking of history, utopia and kitsch. Works by Shalamov, Nabokov, Sinyavsky-Tertz, and others.
Note: Expected to be given in 2013–14. Most materials also available in English. Open to qualified undergraduates.
Prerequisite: Reading knowledge of Russian.

Slavic 287. Poetic Self-Creation in 20th-Century Russia: Seminar
Catalog Number: 8028
Stephanie Sandler
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Examines how poems create self-images for poets working in and after Russian modernism,
including Khlebnikov, Vvedenskii, Mandel'shtam, Tsvetaeva, Barkova, Brodsky, Sedakova, Shvarts, Dragomoshchenko. Relies on literary and psychoanalytic theories of identity.  
Note: Open to qualified undergraduates with permission of instructor.  
**Prerequisite:** Reading knowledge of Russian required.

[**Slavic 290. 19th-Century Ukrainian Prose: Seminar**]
Catalog Number: 18964
George G. Grabowicz
Half course (fall term). Tu., 2–4. EXAM GROUP: 16, 17
Note: Expected to be given in 2013–14.  
**Prerequisite:** Reading knowledge of Russian.

**Slavic 292. 20th-Century Ukrainian Prose**
Catalog Number: 5733
George G. Grabowicz
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
A survey of Ukrainian prose focusing on the avant-garde of the 1920s-1940s (Khvyl’ovyj, Johansen, Domontovych, Kosach) and the most recent period (Andijevs’ka, Andrukhovych, Izdyr and others).
**Prerequisite:** Reading knowledge of Ukrainian.

[*Slavic 299. Proseminar*]
Catalog Number: 7972
Joanna Nizynska  
Half course (fall term). Th., 2–4. EXAM GROUP: 16, 17
Introduction to graduate study in Slavic. Selected topics in literary analysis, history, and theory.  
Note: Expected to be given in 2013–14. Open to qualified undergraduates with permission of the instructor.

**Cross-listed Courses**

[Comparative Literature 242 (formerly Literature 242). Text, Image, Public Sphere]  
[Comparative Literature 253. Literature, Art and Exile]
**Comparative Literature 256. Archeology of Modernity and Visual Culture**
[Comparative Literature 273. Approaches to Modernity: The Metropolis]
**History 2272. The Soviet Union: Seminar**
**Linguistics 250. Old Church Slavonic**
[**Linguistics 252. Comparative Slavic Linguistics**]

**Graduate Courses of Reading and Research**

*Slavic 300. Direction of Doctoral Dissertations*
Catalog Number: 4477
Jonathan H. Bolton 4892 (on leave fall term), Svetlana Boym 1926, Julie A. Buckler 2960,
Social Policy

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Higher Degrees in Social Policy

Kathryn Edin, Professor of Public Policy and Management at the John F. Kennedy School of Government (Kennedy School) (Chair)
Jason Beckfield, Professor of Sociology
Jennifer L. Hochschild, Henry LaBarre Jayne Professor of Government and Professor of African and African American Studies, Harvard College Professor
Christopher Jencks, Malcolm Wiener Professor of Social Policy at the John F Kennedy School of Government (Kennedy School)
Theda Skocpol, Victor S. Thomas Professor of Government and Sociology
Mary C. Waters, M. E. Zukerman Professor of Sociology
Bruce Western, Professor of Sociology
William Julius Wilson, Lewis P. and Linda L. Geyser University Professor

Other Faculty Offering Instruction in Social Policy

Mary C. Brinton, Reischauer Institute Professor of Sociology
David T. Ellwood, Scott Black Professor of Political Economy (Kennedy School)
Peter A. Hall, Krupp Foundation Professor of European Studies
Torben Iversen, Harold Hitchings Burbank Professor of Political Economy (on leave 2012-13)
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Jeffrey B. Liebman, Malcolm Wiener Professor of Public Policy at the John F. Kennedy School
of Government (Kennedy School)
Peter V. Marsden, Edith and Benjamin Geisinger Professor of Sociology, Harvard College
Professor, Dean of Social Science
Orlando Patterson, John Cowles Professor of Sociology
Paul E. Peterson, Henry Lee Shattuck Professor of Government (on leave spring term)
Robert D. Putnam, Peter and Isabel Malkin Professor of Public Policy
Robert J. Sampson, Henry Ford II Professor of the Social Sciences
Sidney Verba, Carl H. Pforzheimer University Professor, Emeritus
Martin K. Whyte, John Zwaanstra Professor of International Studies and of Sociology (on leave spring term)
Julie Boatright Wilson, Harry S. Kahn Senior Lecturer in Social Policy at the John F. Kennedy
School of Government (Kennedy School)
Christopher Winship, Diker-Tishman Professor of Sociology (on leave spring term)

This program confers the PhD in Government and Social Policy or the PhD in Sociology and Social Policy. These joint PhD offerings are designed for students who wish to combine the full disciplinary depth of a PhD in political science or sociology with multidisciplinary study on issues of social policy.

Created in 1999, the PhD in Government & Social Policy and the PhD in Sociology & Social Policy constitute joint ventures linking the departments of Government and Sociology in Harvard’s Faculty of Arts and Sciences with the Social Policy faculty of the Harvard Kennedy School. "Discipline-plus" in its philosophy, the Social Policy program ensures a solid disciplinary foundation in political science or sociology, while providing unique opportunities for multidisciplinary training and research in social policy, a doctoral experience enriched by the insights of neighboring social science disciplines.

This degree is intended for students whose research interests embrace such issues as economic inequality, poverty, urban neighborhoods and spatial segregation, changing family structures, race and ethnicity, immigration, educational access and quality, political inequalities and participation, distributive politics, and comparative and institutional studies of social policy, particularly in the U.S. and Europe.

Further information about the Social Policy Ph.D. program may be obtained from the program website (www.hks.harvard.edu/socialpol). Questions or requests for additional printed materials should be directed to Pamela Metz, Director, via e-mail (social—policy@harvard.edu).

**Graduate Courses of Reading and Research**

*Social Policy 300. Reading and Research*
Catalog Number: 6290
Members of the Committee

*Social Policy 302. Doctoral Dissertation Research*
Catalog Number: 9707
Members of the Committee
**Social Policy 303qc. Introduction to Social Policy Research**  
Catalog Number: 56297  
*Kathryn Edin (Kennedy School) 5952*  
Quarter course (spring term). Hours to be arranged.  
Required of and limited to first-year PhD students in Social Policy. Explores current issues in Social Policy research based on the Multidisciplinary Program in Inequality & Social Policy Seminar Series.  
*Note:* This course may be taken only for quarter credit.  
*Prerequisite:* Limited to first-year PhD students in Social Policy.

**Cross-listed Courses**

*Government 2340b. Social Policy II*  
*Sociology 223. American Society and Public Policy: Research Seminar - (New Course)*  
*Sociology 296a. Proseminar on Inequality & Social Policy I*  
*Sociology 307. Proseminar on Inequality and Social Policy III*

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**Social Studies**

**AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION**

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Eric Beerbohm, Frederick S. Danziger Associate Professor of Government and of Social Studies  
Steven C. Caton, Khalid Bin Abdullah Bin Abdulrahman Al Saud Professor of Contemporary Arab Studies  
Richard N. Cooper, Maurits C. Boas Professor of International Economics  
Matthew Stephen Desmond, Assistant Professor of Sociology and of Social Studies *(on leave spring term)*  
Michael Frazer, Associate Professor of Government and of Social Studies  
Peter E. Gordon, Amabel B. James Professor of History, Harvard College Professor *(on leave 2012-13)*  
Peter A. Hall, Krupp Foundation Professor of European Studies  
Stanley Hoffmann, Paul and Catherine Buttenwieser University Professor  
Andrew Jewett, Associate Professor of History and of Social Studies  
Michael R. Kremer, Gates Professor of Developing Societies
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Charles S. Maier, Leverett Saltonstall Professor of History
Amanda D. Pallais, Assistant Professor of Economics
Michael E. Rosen, Professor of Government
Emma Rothschild, Jeremy and Jane Knowles Professor of History
Michael J. Sandel, Anne T. and Robert M. Bass Professor of Government
Tommie Shelby, Professor of African and African American Studies and of Philosophy
Daniel F. Ziblatt, Professor of Government (on leave 2012-13)

Other Faculty Offering Instruction in Social Studies

Kiku Adatto, Lecturer on Social Studies
Terry K. Aladjem, Lecturer on Social Studies
Chiwen Bao, Lecturer on Social Studies
Kevin N. Caffrey, Lecturer on Social Studies
Rodrigo Chacon, Lecturer on Social Studies
Nara Dillon, Lecturer on East Asian Languages and Civilizations
Katie Jane Gallagher, Lecturer on Social Studies
Marshall L. Ganz, Lecturer on Social Studies
Jill Iris Goldenziel, Lecturer on Social Studies, Lecturer on Government
Jonathan M. Hansen, Lecturer on Social Studies, Senior Lecturer on Social Studies
Meghan Elisabeth Healy, Lecturer on History and Literature
Alison Denton Jones, Lecturer on Sociology
Anush Kapadia, Lecturer on Social Studies
Brendan Jeffrey Karch, Lecturer on Social Studies
Matthew Walter Landauer, College Fellow in the Committee on Degrees in Social Studies
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Christopher Stephen Meckstroth, Lecturer on Social Studies
Nicole D. Newendorp, Lecturer on Social Studies
Nikolas Prevelakis, Lecturer on Social Studies
Lisa Stampnitzky, Lecturer on Social Studies
Carla Yumatle, Lecturer on Social Studies

Primarily for Undergraduates

*Social Studies 10a, Introduction to Social Studies*
Catalog Number: 5278
Richard Tuck, Michael Frazer and members of the Committee
Half course (fall term). Tu., 2-4, and a weekly section Th., 2-4. EXAM GROUP: 16, 17
This course offers an introduction to the classic texts of social theory of the eighteenth and nineteenth centuries. Our focus will be on the rise of democratic, capitalist societies and the concomitant development of modern moral, political, and economic ideas. Authors we will examine include Jean-Jacques Rousseau, Adam Smith, Alexis de Tocqueville, John Stuart Mill, and Karl Marx.
Note: This course is limited to sophomores and Social Studies concentrators. This course is a
prerequisite for sophomores applying to Social Studies. Students planning to take this class must attend the first lecture to be admitted.

*Social Studies 10b. Introduction to Social Studies
Catalog Number: 5097
Richard Tuck, Michael Frazer and members of the Committee
Half course (spring term). Tu., 2-4, and a weekly section Th., 2-4. EXAM GROUP: 16, 17
This class continues the introduction to the classic texts of social theory begun in Social Studies 10a through the twentieth century. Authors include Friedrich Nietzsche, Max Weber, Emile Durkheim, Sigmund Freud, and Michel Foucault.
Note: This course is limited to Social Studies concentrators who have taken Social Studies 10a.

Social Studies 40. Philosophy and Methods of the Social Sciences
Catalog Number: 0476
Eric Beerbohm
Half course (spring term). Tu., Th., at 10; Tu., at 5; Tu., at 8 p.m. EXAM GROUP: 12
This course integrates research methods with an investigation of the philosophical foundations of the social sciences. Topics covered include causal explanation, interpretation, rational choice and irrationality, relativism, collective action, and social choice.

*Social Studies 91r. Supervised Reading and Research
Catalog Number: 9855
Anya Bernstein Bassett and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Individual work in Social Studies on a topic not covered by regular courses of instruction. Permission of the Director of Studies required.

*Social Studies 99. Tutorial — Senior Year
Catalog Number: 7501
Anya Bernstein Bassett
Full course (indivisible). Hours to be arranged.
Writing of senior honors essay.
Note: Required for concentrators.

Social Studies 98 — Junior Tutorials: Fall Term

Note: Admission is based on student preferences and a lottery system. Undergraduate non-concentrators may enroll in these tutorials if space is available.

*Social Studies 98ax. Development and Modernization: A Critical Perspective
Catalog Number: 0752 Enrollment: Limited to 10.
Stephen A. Marglin
Half course (fall term). Tu., 12–2.
What assumptions about human beings underlie the conviction that development and modernization constitute progress, that the developed West points the way for the rest of the world? Does economic growth involve a package that necessarily changes the society, the polity,
and the culture along with the economy? This tutorial provides a framework for thinking about these questions, both in the context of the West, and in the context of the Third World.

*Note:* This course will be lotteried.

**Social Studies 98fu. Practicing Democracy: Leadership, Community, Power**
Catalog Number: 7432 Enrollment: Limited to 10.
*Marshal L. Ganz*

*Half course (fall term). Hours to be arranged.*

Making democracy work requires an “organized” citizenry with power to assert its interests effectively. Yet US political participation declines, growing more unequal, as new democracies struggle to make citizen participation possible. Students learn to address public problems by organizing: developing leadership, building community, and mobilizing power. Our pedagogy links sociological, political science, and social psychology theory with democratic practice.

*Note:* Ten hours per week of field work required. This course will be lotteried.

**Social Studies 98kb. Gender in Developing Nations**
Catalog Number: 2276 Enrollment: Limited to 10.
*Meghan Elisabeth Healy*

*Half course (fall term). Tu., 2–4.*

This seminar examines national identities, international solidarities, and struggles for social justice in the modern world from gendered perspectives. We take an historical approach, informed by ethnography and social theory. We first explore how gendered ideals and relations shaped colonial and anti-colonial projects in the nineteenth and twentieth centuries. We then analyze how gender has shaped transnational movements since the Second World War, emphasizing international development projects and ‘Third World’ and ‘Global South’ alliances.

*Note:* This course will be lotteried.

**Social Studies 98lh. Education and American Society**
Catalog Number: 83855 Enrollment: Limited to 10.
*Chiwen Bao*

*Half course (fall term). Tu., 3–5.*

Explores how education has been and continues to be a central institution of American society, reflecting social ideals and ideologies while also directly shaping the contours and structures of society in both productive and detrimental ways. Examines different philosophical foundations of formal learning and how those theories have become manifested across time in various educational practices. Investigates how schools currently operate, specific issues the American educational system faces, and the implications of various schooling practices for structuring American society.

*Note:* This course will be lotteried.

**Social Studies 98li. Protest and Violence in Asia: Ethnicity, Religion, and Other Motivations**
Catalog Number: 12939 Enrollment: Limited to 10.
*Kevin N. Caffrey*

*Half course (fall term). Hours to be arranged.*

This course inquires into the conditions of protests, self-immolations, and rioting by examining
cultural, social, and political difference to look at violence as phenomena. We examine cases such as discord in Sri Lanka; communal violence in South Asia; ethnic wars in Burma (Myanmar); discord and protest in China; ethno-religious violence in Indonesia; or Muslim ‘insurgency’ in southern Thailand. The course will bring critical attention to the issues of ethnicity, religion, conflict, and protest while analyzing violence as an anthropological category in order to situate current social and political events.

*Note:* This course will be lotteried.

**Social Studies 98mf. Liberalism and Its Critics**

Catalog Number: 36649 Enrollment: Limited to 10.

*Carla Yumatle*

*Half course (fall term).* W., 2–4.

This course provides a critical examination of key debates around liberalism. The first part analyzes both the classical accounts of liberalism and the relation between liberalism and democracy. The second part focuses on variants of liberalism and the relative importance that equality and freedom, culture, value pluralism, toleration and state neutrality play in the foundations of a liberal order. The third part examines various critical approaches of liberalism including utilitarianism, communitarianism, feminism, neo-republicanism, and radical views.

*Note:* This course will be lotteried.

**Social Studies 98mi. Migration in Theory and Practice**

Catalog Number: 34608 Enrollment: Limited to 10.

*Nicole D. Newendorp*

*Half course (fall term).* W., 1–3.

In this course, we will examine how and why people migrate from one location to another, focusing both on the theoretical paradigms scholars use to explain migration processes as well as on the individual experiences of migrants. Topics include transnationalism, diaspora, identity formation, integration and assimilation, citizenship claims, and the feminization of migration. Ethnographic readings focus primarily on migration to the US, but also include cases from other world areas, most notably Asia.

*Note:* This course will be lotteried.

**Social Studies 98nb. Inequality and Social Mobility in America**

Catalog Number: 34432 Enrollment: Limited to 10.

*Anya Bernstein Bassett*

*Half course (fall term).* Th., 1:30–3:30.

The United States is currently experiencing high levels of income and wealth inequality and comparatively low levels of social mobility. This course will ask why this is and what, if anything, should be done about it. We will consider both social and individual explanations for inequality and social mobility, and we will examine efforts to increase mobility through educational and legal means.

*Note:* This course will be lotteried.

**Social Studies 98nd. Mass Violence, Memory, and Justice/Reconciliation**

Catalog Number: 25731 Enrollment: Limited to 10.

*Jonathan M. Hansen*
This tutorial examines the problem of national reconciliation after mass violence. How does a nation sundered by genocide, civil war, or political repression reestablish the social trust and civic consciousness required of individual and collective healing? What makes some reconciliations successful, others less so? The course will engage these and other questions from historical and contemporary perspectives, exploring the legacy of mass violence going back centuries, while comparing reconciliation projects across cultures, countries, and continents.

Note: This course will be lotteried.

*Social Studies 98ng. Heidegger and Social Thought
Catalog Number: 16034 Enrollment: Limited to 10.
Rodrigo Chacon
Half course (fall term). W., 4–6.
Martin Heidegger was perhaps the most important and influential philosopher in the Continental tradition in the 20th century, yet the source of his influence has not been fully explored. To that end, we shall trace the development of his thought from his recently published lectures on Aristotle to Being and Time and his later works. Thus, we shall rediscover Heidegger as he appeared to young undergraduates in the early 1920s who would go on to develop some of the most powerful currents of contemporary social thought.

Note: This course will be lotteried.

*Social Studies 98nu. Poor People’s Movements in Latin America - (New Course)
Catalog Number: 15145 Enrollment: Limited to 10. Course will be lotteried.
Steven R. Levitsky
This course critically examines efforts to organize the poor in Latin America, with a focus on the bases of collective action. It covers early patterns of popular sector organization, such as corporatism and populism, revolutionary movements of the 1960s, contemporary parties, social movements, and transnational advocacy networks, and the persistence of clientelism and populism. Finally, the course examines the causes and consequences Latin America’s recent turn to the left.

*Social Studies 98nw. Health Care in America - (New Course)
Catalog Number: 81774 Enrollment: Limited to 10. Course will be lotteried.
Aaron Pascal Mauck
Half course (fall term). Th., 2–4.
This course explores the social and cultural politics of healthcare in America, highlighting the ways in which perceived failures of the healthcare system have informed the development and implementation of specific policies. We will discuss several case studies of controversy related to issues of cost, access, and equity, exploring how such issues have influenced strategies for reform.

*Social Studies 98nx. Human Rights and International Law - (New Course)
Catalog Number: 36453 Enrollment: Limited to 10. Course will be lotteried.
Jill Iris Goldenziel
Half course (fall term). Th., 3–5.
This course explores how politics influences the creation, acceptance, operation, and effectiveness of international law governing human rights. The course is motivated by a series of questions that scholars have only begun to address: Why do states commit to international human rights law? Why, under what conditions, and to what degree do states comply with these laws? As international human rights norms have become legal obligations, why and how has the U.S. responded?

**Social Studies 98 — Junior Tutorials: Spring Term**

*Social Studies 98cl. Law and American Society*
Catalog Number: 7389 Enrollment: Limited to 10.
Terry K. Aladjem
**Half course (spring term). Tu., 3–5.**
Examines law as a defining force in American culture and society in four dimensions—as it establishes individual rights, liberties, and limits of toleration; as it attempts to resolve differences among competing constituencies; as it sets out terms of punishment and social control, and as a source of informing images and ideological consistency.
*Note:* A prison trip is planned, subject to approval. This course will be lotteried.

*Social Studies 98jl. Global Social Movements*
Catalog Number: 8965 Enrollment: Limited to 10.
Alison Denton Jones
**Half course (spring term). Hours to be arranged.**
Social movements are often considered a driving force behind political, social, and cultural change. This course explores the major theoretical and empirical approaches used in the social sciences to understand the emergence, endurance, and outcomes of social movement activism. The course will examine a range of case studies including movements dealing with environmental justice, health, citizenship, and racial inclusion taken from a range of national (including the U.S.) and transnational contexts.
*Note:* This course will be lotteried.

*Social Studies 98kg. The Political Economy of Health in the Developing World*
Catalog Number: 0037 Enrollment: Limited to 10.
Nara Dillon
**Half course (spring term). W., 2–4.**
This course places the politics of health care in the context of economic development. Although health care and social programs are often considered secondary to economic growth, they have come to play an increasingly central role in development policy. This course explores the interaction between development and health through a survey of different theoretical approaches to development, combined with empirical research on public health, AIDS, family planning, and development programs.
*Note:* This course will be lotteried.

*Social Studies 98lf. Globalization and the Nation State*
Catalog Number: 68748 Enrollment: Limited to 10.
Nikolas Prevelakis
Despite globalization, the nation is still a major actor in today’s world. This course tries to understand why this is so by examining the role that nationalism plays in peoples’ identities and the effects of globalization on nations and nationalism. Examples from the United States, Western Europe, Latin America, India, and the Middle East.

Note: This course will be lotteried.

*Social Studies 98mg. Global Distributive Justice
Catalog Number: 67986 Enrollment: Limited to 10.
Katie Jane Gallagher
Half course (spring term). Th., 7–9 p.m.
This course examines how concerns about socio-economic justice apply beyond the limits of the domestic state. Do we have reason to care about equality at the international level? If so, should we care about the relative standing of individuals, or of nation-states? Who, if anyone, is responsible for addressing global inequalities? Topics covered include the moral relevance of borders, natural resource distribution, immigration policy, climate change, the international status of women, and global institutional design.

Note: This course will be lotteried.

*Social Studies 98nc. The Economics of Education
Catalog Number: 98561 Enrollment: Limited to 10.
Amanda D. Pallais
This course examines economic aspects of education issues, using quantitative research. We will examine several of the major proposed strategies for improving schools including increasing school resources, enhancing school accountability, improving teacher selection and training, and creating school choice through vouchers and charter schools. We will also discuss how to write a quantitative research paper.

Note: This course will be lotteried.

*Social Studies 98ne. Nation, Race, and Migration in Modern Europe
Catalog Number: 52449 Enrollment: Limited to 10.
Brendan Jeffrey Karch
This course examines the nexus of migration and European politics since the late nineteenth century. Population movements across European borders have both shaped, and been shaped by, changing conceptions of race, nationality, and citizenship. These changes will be addressed through topics including forced population transfers, decolonization, guest worker programs, anti-immigrant politics, and migration in a unifying Europe. Readings will combine interdisciplinary historical study with contemporary debates.

Note: This course will be lotteried.

*Social Studies 98ni. Global Financial Crisis
Catalog Number: 31346 Enrollment: Limited to 10.
Anush Kapadia
This course will seek to outline the conditions of possibility—philosophical, historical, economic, social, and cultural—for a near cataclysmic and almost certainly epochal crisis. Its central methodological premise will be to treat markets as socio-historical institutions, as artifacts whose construction is the very medium of political and economic competition. Thus setting the crisis against a broader backdrop than the received narrative, the course will conclude by outlining how these structures continue to shape the present global conjuncture.

Note: This course will be lotteried.

Social Studies 98np. Power and Critique - (New Course)
Catalog Number: 62175
Christopher Stephen Meckstroth
Half course (spring term). Tu., 7–9 p.m.
This tutorial picks up where Social Studies 10 leaves off, exploring in detail major figures and approaches in continental social theory from recent decades, including poststructuralism, psychoanalysis, critical theory, and postcolonial studies. We look at relations between culture, power, and subjectivity, the possibility of social critique and emancipation, and the significance of postwar developments like the rise of consumer capitalism, decolonization, new social movements, and, more recently, globalization. Theorists include Foucault, Lacan, Bourdieu, Arendt, Habermas, Honneth, Young, and Chakrabarty.
Note: This course will be lotteried.

*Social Studies 98nq. Global East Asia - (New Course)
Catalog Number: 49314 Enrollment: Limited to 10.
Nicole D. Newendorp
In this course, we will explore how social life in contemporary East Asia is both influenced by and contributes to processes of globalization. Ethnographic readings on China, Korea, and Japan focus on migration, gender roles, consumption, media, and markets as we trace the role of the global in everyday life for rural and urban inhabitants of a variety of East Asian locations. For these individuals, engagement with the global structures how they make sense of the world and creates desires for future life change.
Note: This course will be lotteried.

*Social Studies 98ns. Culture and Politics in American Society - (New Course)
Catalog Number: 95758 Enrollment: Limited to 10.
Lisa Stampnitzky
This course aims to provide a conceptual and methodological toolkit for studying the intersection of "culture," broadly understood, and politics in American society. Key questions to be addressed will include: How can "culture" help us understand American politics? What, if anything, is distinctive about American politics and society? And how does culture shape individual and societal approaches to particular political issues?
Note: This course will be lotteried.

*Social Studies 98nt. Science, Power, and Democracy - (New Course)
Catalog Number: 12899 Enrollment: Limited to 10.
Matthew Walter Landauer
Half course (spring term). W., 4–6.
This course investigates the relationship between science and democracy, and between knowledge and power, in the modern world. Questions to be considered include the compatibility of democratic and scientific values; the role of expertise in democratic decision-making; and the role of science in the expansion of state power and control over human subjects. We will approach these questions theoretically and also explore a number of case studies at the intersection of politics and science.
Note: This course is lotteried.

*Social Studies 98ny. And Justice for All: Moral and Ethical Conflict in American Schools - (New Course)*
Catalog Number: 85576 Enrollment: Limited to 10.
Olivia K. Newman
Half course (spring term). W., 3–5.
This course explores moral and ethical questions concerning the provision of education in the United States. What kind of education is appropriate in a free society? What is a just distribution of educational resources? What rights do students (and parents) have? How should we settle conflicts over curricula? We will address these and related questions with help from classic and contemporary philosophers, political theorists, sociologists, legal scholars, educators, and policy analysts.
Note: This course will be lotteried.

Sociology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Sociology

Mary C. Brinton, Reischauer Institute Professor of Sociology (Chair)
Laura L. Adams, Lecturer on Sociology
Robyn E. Angley, Lecturer on Sociology
Jason Beckfield, Professor of Sociology
Lawrence D. Bobo, W. E. B. Du Bois Professor of the Social Sciences
Bart Bonikowski, Assistant Professor of Sociology
Nicholas A. Christakis, Professor of Sociology in the Faculty of Arts and Sciences and Professor of Medical Sociology in the Faculty of Medicine
Matthew Stephen Desmond, Assistant Professor of Sociology and of Social Studies (on leave spring term)
Frank Dobbin, Professor of Sociology (Director of Graduate Studies)
Filiz Garip, Associate Professor of Sociology
Justin Gest, Lecturer on Government and on Sociology
Margaret M. Gough, Lecturer on Sociology
Patrick Hamm, Lecturer on Sociology
Seth Donal Hannah, Lecturer on Sociology
Ben Herzog, Lecturer on Sociology
Tamara Kay, Associate Professor of Sociology
Alexandra Achen Killewald, Assistant Professor of Sociology
Michèle Lamont, Robert I. Goldman Professor of European Studies and Professor of Sociology and of African and African American Studies
Kimberlyn Rachael Leary, Lecturer on Sociology; Associate Professor of Psychology in the Department of Psychiatry (Medical School)
David Luberoff, Visiting Lecturer on Sociology, Kennedy School of Government (Kennedy School)
Peter V. Marsden, Edith and Benjamin Geisinger Professor of Sociology, Harvard College Professor, Dean of Social Science
Rachel Meyer, Lecturer on Sociology (Assistant Director of Undergraduate Studies)
Timothy Nelson, Lecturer on Sociology (Kennedy School)
Daniel T. O’Brien, Lecturer on Sociology
Orlando Patterson, John Cowles Professor of Sociology
Robert J. Sampson, Henry Ford II Professor of the Social Sciences
Adam B. Seligman, Visiting Professor of Sociology
Theda Skocpol, Victor S. Thomas Professor of Government and Sociology
Jocelyn Vitera, Associate Professor of Sociology
Joshua Wakeham, College Fellow in the Department of Sociology
Mary C. Waters, M. E. Zukerman Professor of Sociology (Director of Undergraduate Studies-spring term)
Cory Theodore Way, Lecturer on Sociology
Bruce Western, Professor of Sociology
Martin K. Whyte, John Zwaanstra Professor of International Studies and of Sociology (on leave spring term)
William Julius Wilson, Lewis P. and Linda L. Geyser University Professor
Christopher Winship, Diker-Tishman Professor of Sociology (Director of Undergraduate Studies-fall term) (on leave spring term)

Other Faculty Offering Instruction in the Department of Sociology

Jim Bildner, Adjunct Lecturer in Public Policy (Kennedy School)
Kathryn Edin, Professor of Public Policy and Management at the John F. Kennedy School of Government (Kennedy School)
Mary-Jo Del Vecchio Good, Professor of Global Health and Social Medicine (Medical School)
Sheila Jasanoff, Pforzheimer Professor of Science and Technology Studies at the John F. Kennedy School of Government (Kennedy School)
Christopher Jencks, Malcolm Wiener Professor of Social Policy at the John F Kennedy School of Government (Kennedy School)
Kimberlyn Rachael Leary, Lecturer on Sociology; Associate Professor of Psychology in the Department of Psychiatry (Medical School)
Christine Webb Letts, Rita E. Hauser Senior Lecturer in the Practice of Philanthropy and Nonprofit Leadership (Kennedy School)
Stanley Lieberson, Abbott Lawrence Lowell Professor of Sociology, Emeritus
Christopher Marquis, Associate Professor (Business School)
Mary Ruggie, Adjunct Professor of Public Policy, Harvard Kennedy School (Kennedy School)

**Introductory Courses**

[Sociology 10. Introduction to Sociology]
Catalog Number: 4814
Instructor to be determined
*Half course (fall term). Hours to be arranged.*
Introduces students to the main objects and goals of Sociology—both for sociology concentrators and curious non-concentrators. Explores the theories of classical authors in the history of sociology (such as Marx, Durkheim, Weber, and beyond). Examines major topics in sociological research (including but not limited to social problems, deviance, inequality, social change, culture, education, social interaction).
*Note:* Expected to be given in 2013–14. May be counted for introductory concentration requirement, if letter-graded.

**Sociology 24. Introduction to Social Inequality**
Catalog Number: 9417
Jason Beckfield
*Half course (spring term). Tu., Th., at 1; Th., at 2; M., at 1; M., at 2. EXAM GROUP: 15*
Examines individual and structural explanations for the generation and maintenance of inequality in the US with comparisons to other societies. The consequences of inequality for individuals and groups are studied.
*Note:* May be counted for introductory concentration requirement, if letter-graded. This course, when taken for a letter grade, meets the Core requirement for Social Analysis.

**Sociology 25. Introduction to the Sociology of Organizations**
Catalog Number: 3609
Frank Dobbin
*Half course (fall term). M., W., at 11; . EXAM GROUP: 4*
Introduces the sociological study of formal organizations. Surveys basic concepts, emphases, and approaches. Attention given to processes within organizations, as well as to relationships between organizations and their environments. Topics include bureaucracy, leadership and power in organizations, interorganizational networks, and coordination among organizations.
*Note:* May be counted for introductory concentration requirement, if letter-graded. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

*Sociology 38. Visualizing Global Social Problems and Social Change in Documentary Photography and Film - (New Course)*
Catalog Number: 63298 Enrollment: Limited to 80.
Tamara Kay
*Half course (fall term). Tu., Th., at 10. EXAM GROUP: 12*
Explores how global social problems (including poverty and inequality, urbanization, migration, globalized labor, human rights, among other issues) are constructed and framed by sociologists and by documentary photographers and filmmakers. Examines history of documentary film and photography in relationship to politics and the development of concerns in sociology with inequality and social justice. Looks at how individual documentarians, non-profit organizations and social movements use film and photography to further their goals and causes. A variety of documentary film and photography genres such as historical, biographical, ethnographic, satire, and political expose will be examined and compared to processes by which filmmakers and photographers engage in social documentation.

**Sociology 43. Social Interaction**  
Catalog Number: 9625  
Timothy Nelson (Kennedy School)  
Half course (spring term). Tu., Th., 11:30-1. EXAM GROUP: 13, 14  
Examines social interactions in public and semi-public spaces as well as small-group dynamics. We will analyze everyday activities like conversations and parties as well as more extreme forms like demonstrations and riots. Emphasizes outside observation of various kinds and components of social interaction. The University’s residence halls, classrooms, activity groups and final clubs will serve as our laboratory. Students will record their observations and analyses in journal entries.  
*Note:* May be counted for introductory concentration requirement, if letter-graded. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis

**Cross-listed Courses**

**Psychology 15. Social Psychology**  
[Societies of the World 21 (formerly Foreign Cultures 63). China’s Two Social Revolutions]  
[Societies of the World 44. Human Trafficking, Slavery and Abolition in the Modern World]  
[United States in the World 24 (formerly Sociology 19). Reinventing Boston: The Changing American City]  
United States in the World 31 (formerly Social Analysis 54). American Society and Public Policy

**Tutorials**

*Sociology 91r. Supervised Reading and Research**  
Catalog Number: 4449  
Rachel Meyer and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged.  
Individual work in sociology under the supervision of teaching staff in the department. A graded supervised course of reading and research on a topic not covered by regular courses of instruction.  
*Note:* Students negotiate topics on their own. A final paper must be filed in the Sociology undergraduate office.
*Sociology 95. Research for Nonprofits*
Catalog Number: 0136 Enrollment: Limited to 25.

Joshua Wakeham

Half course (spring term). Tu., Th., 11:30–1.

Supports students in carrying out a research project for a nonprofit or volunteer organization of their own choice. Examines theories and practices of the nonprofit sector and research methods. Course combines guest speakers, case work, discussion, and student project presentations.  
Note: Required first meeting. Both concentrators and non-concentrators are welcome to apply.

*Sociology 97. Tutorial in Sociological Theory*
Catalog Number: 5079

Rachel Meyer

Half course (fall term; repeated spring term). Hours to be Arranged.

Provides a critical understanding of selected classical and contemporary theorists, including Marx, Weber, Durkheim, Parsons, Merton, Polanyi, Granovetter, Goffman, Foucault, Bourdieu and others. The tutorial explores conceptualizations of society and modernity, the relationship between theory and empirical analysis, and the historical contexts in which theories emerge.  
Note: Required of concentrators, ordinarily sophomores, and secondary concentrators. Required first organizational meeting on Wednesday, September 5, 2012, 4-5pm, WJH 105 for the fall semester. Required first organizational meeting on Monday, January 28, 2013, 4-5pm, (basement of William James Hall).

*Sociology 99. Senior Tutorial*
Catalog Number: 6237

Rachel Meyer and members of the Department

Full course. Hours to be arranged.

Supervision of theses or other honors projects.  
Note: Limited to concentrators, ordinarily seniors. In addition, students of Sociology 99 may also participate in an optional, regularly scheduled weekly group seminar for consultation and discussion about choice of problems, possible data, and research procedures.  
Prerequisite: Sociology 98.

*Sociology 98. Junior Tutorials*

Small group research projects centered on common topics that vary by seminar, term, and year.

[*Sociology 98B. Race and Crime]*
Catalog Number: 75945 Enrollment: Limited to 10.

Instructor to be determined

Half course (spring term). Hours to be arranged.

New research on how and why criminal justice policy in the US has such a powerfully differential negative impact on African American communities.

Note: Expected to be given in 2013–14. Required of and limited to Sociology concentrators. Spring Junior Tutorials are by assignment only.  
Prerequisite: Sociology 97.
Sociology 98Bc. The Logic of Cultural Comparison
Catalog Number: 87077 Enrollment: Limited to 10.
Bart Bonikowski
Half course (fall term). Th., 11–1.
In the context of recent theoretical advances in cultural sociology, the course considers how culture can be systematically compared across populations. While carrying out independent empirical studies, students will navigate the central problems associated with comparative cultural research: defining and measuring cultural phenomena, identifying appropriate units of cultural variation, understanding between- and within-unit heterogeneity, and demonstrating culture’s causal effects.
Note: Required of and limited to Sociology concentrators. Spring Tutorials are by assignment only.
Prerequisite: Sociology 97

Sociology 98Ga. Understanding Mexican Migration Flows to the US
Catalog Number: 67322 Enrollment: Limited to 10.
Filiz Garip
This tutorial guides students through the preparation of an empirical research paper that explores the labor migration of workers from Mexico to the United States using quantitative data and methods.
Note: Required of and limited to Sociology concentrators.
Prerequisite: Sociology 97

Sociology 98Gb. Family, Work, and Inequality - (New Course)
Catalog Number: 86469 Enrollment: Limited to 10.
Margaret M. Gough
Half course (spring term). Th., 11–1.
This course examines variation in the relationships between work and family by race and ethnicity, class, gender, and family structure. Over the course of the term we will examine how work-family relationships have evolved, how they have been affected by the economic downturn, and the potential implications of these changes for inequality. The goal of the course is to gain a stronger understanding of a particular segment of the work-family literature through a semester long research project. Students will conduct independent empirical research on a topic of interest within the study of work and family using quantitative methods and data.

Sociology 98H. Immigration, Politics, and Movements
Catalog Number: 91052 Enrollment: Limited to 10.
Half course (spring term). Hours to be arranged.
Examines immigrant integration in the political sphere. Explores immigrant mobilization and participation in electoral and non-electoral politics.
Note: Expected to be given in 2013–14. Required of and limited to Sociology concentrators. Spring Junior Tutorials are by assignment only.
Prerequisite: Sociology 97.
**Sociology 98Ha. Sociology of Health**
Catalog Number: 57732 Enrollment: Limited to 10.
Seth Donal Hannah
Half course (spring term). Tu., 1–3.
Examines how culture, politics, and finance "matters" in health care through an exploration of the diverse community health centers and major medical centers throughout greater Boston. Students will enhance their qualitative research skills through ethnographic observation, mapping, and historical and documentary analysis of the services provided and populations served in various clinical settings.
*Note:* Required of and limited to Sociology concentrators. Spring Junior Tutorials are by assignment only.

**Sociology 98K. Big Bird Goes to China: Organizations, Culture, and Globalization**
Catalog Number: 47313 Enrollment: Limited to 10.
Tamara Kay
Half course (fall term). W., 1–3.
Examines how different kinds of organizations and institutions work internationally and develop relationships with international partners and counterparts.
*Note:* Required of and limited to Sociology concentrators.
Prerequisite: Sociology 97

[*Sociology 98Kc. Religion in America*] - (New Course)
Catalog Number: 86188 Enrollment: Limited to 8.
Alexandra Achen Killewald
Half course (spring term). Tu., at 10.
The American religious terrain is complex and contested. For many Americans, matters of religious faith, identity, and practice are intertwined, but not synonymous. In this tutorial, students will prepare an empirical research paper that explores a topic of their choosing related to religion in contemporary America, using quantitative data and methods.
*Note:* Expected to be given in 2013–14.
Prerequisite: Sociology 97

**Sociology 98L. Racism and Anti-Racism in Comparative Perspective**
Catalog Number: 54637 Enrollment: Limited to 10.
Michèle Lamont
Half course (fall term). Tu., 1–3.
Students will familiarize themselves with the literatures on racism and anti-racism, as well as racial identity and boundaries and design their own qualitative research project.
*Note:* Required of and limited to Sociology junior concentrators.
Prerequisite: Sociology 97

**Sociology 98M. Social Class in the United States: Identity, Culture, and Consciousness**
Catalog Number: 18222 Enrollment: Limited to 10.
Rachel Meyer
Half course (spring term). W., 11–1.
This course will review a variety of empirical and theoretical perspectives on social class in the
United States with a focus on class-based identities and class consciousness.

*Note:* Required of and limited to Sociology concentrators. Spring Junior Tutorials are by assignment only.

*Prerequisite:* Sociology 97

[*Sociology 98Sa. The Politics and Culture of Food]*

Catalog Number: 73962 Enrollment: Limited to 10.

Kyoko Sato

*Half course (spring term). W., 2–4.*

This course will examine how politics and culture intersect in food and eating practices. Through an exploration of literature on food, students will learn some of the key theoretical concepts in cultural sociology, as well as various analytical and methodological approaches. They will carry out an independent or group research project.

*Note:* Expected to be given in 2013–14.

*Sociology 98Va. Development in Theory and Practice - *(New Course)*

Catalog Number: 12362

Jocelyn Viterna

*Half course (fall term). W., 2–4. EXAM GROUP: 7, 8*

Why are some societies wealthier, healthier, and more highly educated than others? And how might we improve the lives of those individuals with the fewest opportunities? The purpose of this course is to investigate whether and how scholarly theories of development map onto the real world practices of development organizations (state development offices, intergovernmental agencies, not-for-profit organizations) and vice versa. Readings in development sociology will be interspersed with individual student analyses of specific development organizations across a range of issues including (but not limited to) gender, politics, the environment, education, health care, and the economy.

*Prerequisite:* Sociology 97

[*Sociology 98Wb. Race, Poverty, and Family Justice]*

Catalog Number: 24423 Enrollment: Limited to 10.

Kaia Stern

*Half course (fall term). Hours to be arranged.*

This course meets inside Framingham prison and surveys some of the key topics in urban sociology, focusing on major social problems in American cities. With particular attention to factors associated with crime, such as poverty, race, education, gender and employment, the course draws from different academic, media and narrative sources. Our focus on urban communities of concentrated poverty is intended to challenge students to think about policy solutions to complex problems. How do we respond to under-resourced schools, violence, joblessness, drug addiction and incarceration? The last three weeks of the semester will be reserved for students to present research proposals designed to address the problems discussed in class. Questions for consideration: In what ways do various political, economic and religious ideologies shape our understandings of race? What kinds of practices lead us out of poverty? How do we understand family justice?

*Note:* Expected to be given in 2013–14. Required of and limited to Sociology concentrators. First
meeting 8/31/2011, 12 pm.

Prerequisite: Sociology 97

[Sociology 98Wc. Sports and Society]
Catalog Number: 62527 Enrollment: Limited to 10.
Mary C. Waters
Half course (fall term). Tu., 10–12.
This course will examine sports through a sociological lens. We will examine processes of stratification in sports including class, race and gender, as well as sports as a business, the media and sports, and sports and health. Students will do an in depth independent or team based research project on the topic.
Note: Expected to be given in 2013–14. Required of and limited to Sociology concentrators.
Spring Junior Tutorials are by assignment only.
Prerequisite: Sociology 97

For Undergraduates and Graduates

Sociology 107 (formerly United States in the World 21). The American Family
Catalog Number: 9124
Martin K. Whyte
Half course (fall term). M., W., at 12, and a weekly section to be arranged. EXAM GROUP: 5
The American family is often thought to be changing in ways considered unfortunate for children and society. At the same time, the family continues to occupy a central place in people’s lives. We examine how and why American families have changed and explore the consequences of these changes. Aspects of family life considered include premarital sex, mate choice, marriage relations, work and family, gender roles, childrearing, family violence, divorce, and intergenerational relations.
Note: This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Historical Study A. This course fulfills the requirement that one of the eight General Education courses also engage substantially with Study of the Past.

Sociology 108. Inequality at Work - (New Course)
Catalog Number: 13485
Mary C. Brinton
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
The American workplace has become much more diverse over the past 30 years, with women and minorities moving into greater positions of authority. But significant inequalities remain. Why? This course explores how sociologists go about analyzing the reasons for workplace inequalities using a variety of methods from ethnography to surveys to experiments. Using case studies, we pay particular attention to how work can be restructured in ways that increase participation and equality.

Sociology 114. Organizational Failures and Disasters: Leadership in Crisis - (New Course)
Catalog Number: 77614
Joshua Wakeham
Half course (spring term). M., W., at 11. EXAM GROUP: 4
Examines organizational failures and disasters from a variety of sectors and professional fields as way to understand how organizational life influences people’s behavior, thinking, decision-making, and moral judgment.

[Sociology 121. Religion in a Globalizing World]
Catalog Number: 34149

Half course (fall term). Tu., Th., at 10. EXAM GROUP: 12
Far from disappearing as the world modernized, religion today is found everywhere from the public to private spheres. We will explore the places of religion around the globe, from the rise of religious nationalism to transnational immigration networks.
Note: Expected to be given in 2013–14.

Sociology 128. Models of Social Science Research
Catalog Number: 5979
Mary C. Waters
Half course (fall term). M., W., at 10. EXAM GROUP: 3
Introduces the methods and logic social scientists use to study the empirical world. Topics include the scientific method, hypothesis testing, measurement of variables, survey research design and sampling, qualitative interviewing, ethnography, experiments, content analysis, GIS, demography, and the ethics of research.
Note: Required of concentrators, ordinarily sophomores, and secondary concentrators.

[Sociology 129. Education and Society]
Catalog Number: 6298 Enrollment: Limited to 40.
Mary C. Brinton
Half course (spring term). M., W., at 1. EXAM GROUP: 6
Examines the key role played by the educational system in reproducing and transforming modern society. Considers the purposes served by an educational system, the distinctiveness of the American educational system in comparison to other countries, the ways that education connects to the labor market in the U.S. and other societies, and why educational attainment is related to social class and ethnicity.
Note: Expected to be given in 2013–14.

Sociology 132. Mobilizing for Social Change: Social Movements and Revolutions around the World - (New Course)
Catalog Number: 51482
Jocelyn Viterna
Half course (fall term). Tu., Th., at 2;
Social movements and revolution have long been driving forces behind political, social, and cultural change. From the Civil Rights movement of the 60s to the recent and unpredicted "Arab Spring," the extraordinary mobilization of ordinary people is routinely credited with fundamentally re-shaping societal institutions--the polity, the economy, religion, gender, race, and even the environment. But can we really define and study something as ephemeral as social mobilization? Do we know how social movements begin? Why might they become
revolutionary? Can they make a difference in the societies they target? This course examines these questions within the sociological literature on collective action. Theories of social movements and revolutions are then applied to a series of case studies around the globe. Case studies may include the US, Iran, China, El Salvador, Chile, India, Poland, Argentina, Egypt, and Nigeria, among others. Students will also be required to apply course readings to the collective action case of their choosing throughout the semester.

**Sociology 137. Money, Work, and Social Life**
Catalog Number: 1589 Enrollment: Limited to 80.
Filiz Garip
*Half course (spring term). M., W., at 12 and weekly section. EXAM GROUP: 5*
Examining different sectors of the economy from corporations and finance to households, immigrants, welfare, and illegal markets, we explore how in all areas of economic life people are creating, maintaining, symbolizing, and transforming meaningful social relations. Economic life, from this perspective, is as social as religion, family, or education.

**Sociology 138. Political Sociology**
Catalog Number: 25214 Enrollment: Limited to 25.
Justin Gest
*Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16*
This course examines power relations between people in different political contexts: First, the state and its overarching culture and attempts at governance; Second, open society where people interact with each other outside institutional control; Third, markets where people compete for power subject to prevailing rules or norms; And fourth, in revolt when people organize to change the dynamics of power in such contexts. At hand each week are key questions that underpin power relations between people in modern societies.

**Sociology 142. Urban Problems and Politics - (New Course)**
Catalog Number: 89889
David Luberoff (Kennedy School)
*Half course (fall term). Tu., Th., at 12; . EXAM GROUP: 14*
Facing both pressing social issues and promising economic opportunities, key actors in U.S. cities have responded with creative efforts to address such issues as housing, education, economic development, neighborhood revitalization, public safety, transportation, and public health. Students will use a mix of case studies and theories of urban social relations, urban politics, urban planning, and urban economics to explore those issues and responses to them - with a particular focus on how and why some promising strategies are adopted while others often are ignored.

**Sociology 143. Building Just Institutions - (New Course)**
Catalog Number: 10985 Enrollment: Limited to 20.
Joshua Wakeham
*Half course (fall term). Th., 2:30–4:30. EXAM GROUP: 16, 17, 18*
How can and do people build institutions that are just? This course examines the psychological and sociological underpinnings of people’s understanding of justice and their motivation to make situations just. The course draws heavily on real world cases from a variety of social, cultural,
and historical settings, as well thinking and research from sociology, philosophy, psychology, and anthropology.

**[Sociology 145. Urban Social Problems]**
Catalog Number: 8737

Half course (fall term). M., W., at 2. EXAM GROUP: 7
Examines first the process by which social phenomenon come to be identified as social problems, then turns to how sociologists have studied social problems from the beginning of the 20th century and onward. We conclude with a discussion of contemporary social problems in US cities (poverty, family structure, neighborhoods, labor markets, crime, and education), how they are framed, and policy solutions.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

**Sociology 147. The Shareholder Value Management Revolution**
Catalog Number: 94147 Enrollment: Limited to 25.
*Frank Dobbin*

Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
Since the late 1970s, the American style of management has been revolutionized. This course reviews the history of American management strategies, focusing on the origins and effects of the shareholder value approach that now prevails among leading firms. Shareholder value traces its roots to America’s lackluster performance in the global economy during the 1970s, and the prescriptions offered by agency theorists in the field of financial economics. We explore how the shareholder value approach was promoted in American firms. We look at how the approach has changed core corporate strategy, how it has affected corporate performance, and how it has shaped labor markets and income inequality.

**Sociology 149. Inequality, Poverty, and Wealth in Comparative Perspective** - (New Course)
Catalog Number: 19398
*Patrick Hamm*

Half course (fall term). Tu., Th., at 1; W., at 2; W., at 3; Th., at 8 p.m. EXAM GROUP: 15
In capitalist societies around the world, inequalities in income and wealth rank among the most controversial and hotly debated political issues. Policy-makers and social scientists alike are interested in determining the sources of inequality, its consequences, whether certain levels of inequality are acceptable, how inequality relates to poverty, and whether and how the state should intervene in distributional issues. This course takes a step back from these concerns and examines the fundamental causes of inequality. Rather than asking how the proverbial pie is distributed, we will explore how the pie is actually baked. The course is structured in two parts. The first segment introduces students to a sociological political economy and situates the concept of inequality in a broader analytical framework. The second segment applies this conceptual toolkit to examine the political economy of inequality in different market societies, including advanced industrial nations, developing countries, and former socialist economies.

*Sociology 150. Neighborhood Effects and the Social Order of the City** - (New Course)
Catalog Number: 31834 Enrollment: Limited to 25.
Robert J. Sampson  
**Half course (spring term). M., 4–6. EXAM GROUP: 9**

Ideas about order and disorder have driven debates about the city for over a century. After reviewing classic approaches we will examine contemporary urban research on neighborhood inequality, "broken-windows" and crime, racial segregation, the challenges of ethnic diversity and immigration, neighborhood social networks, the symbolic meanings of disorder, and competing visions for the uses of public space. Students will conduct field-based observations drawing upon cutting-edge methods employed by urban sociologists to understand the workings of the modern city.

*Sociology 152. Philanthropy and Public Problem-Solving - (New Course)*  
Catalog Number: 96881 Enrollment: Limited.  
Christine Webb Letts (Kennedy School) and Jim Bildner (Kennedy School)  
**Half course (spring term). Tu., Th., 2:30-4. EXAM GROUP: 16, 17**

This course will explore the role of philanthropy in public problem-solving. Using cases and readings, the course will cover the history and role of philanthropy and the nonprofit sector, relationship of both to government, the nature of strategic philanthropy, organizational assessment and impact of private action for public good. Students will chose a problem area with a focus on Boston, and, in teams, research the policies, responses/interventions, role of institutions, strengths and weaknesses of the response and institutional arrangements associated with the problem. A foundation has provided 100,000 dollars (for an enrollment of more than 20 students) for the students to grant to organizations determined as a result of their research.  
*Note: Offered jointly with the Kennedy School as MLD-805. Course will meet at the Kennedy School.*

*Sociology 155. Class and Culture*  
Catalog Number: 8934  
Timothy Nelson (Kennedy School)  
**Half course (fall term). Tu., Th., 11:30–1;. EXAM GROUP: 13, 14**

Examines the intersection of social class and culture--both popular culture and "culture" in the anthropological sense. Focus on different class cultures as well as the cultural views of the class system, how social class is embedded in various high and popular cultural products such as art, music books, movies and material goods, and finally the question of how class is reproduced through culture. There will be several short research/analysis projects.  
*Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief and the Core requirement for Social Analysis.*

*Sociology 156. Quantitative Methods in Sociology*  
Catalog Number: 8958  
Bruce Western  
**Half course (spring term). M., W., (F.), at 10. EXAM GROUP: 3**

Introduces quantitative analysis in social research, including principles of research design and the use of empirical evidence, particularly from social surveys. Descriptive and inferential statistics, contingency table analysis, and regression analysis. Emphasis on analysis of data and presentation of results in research reports.  
*Note: Required of and limited to Sociology concentrators, ordinarily sophomores. This course,
when taken for a letter grade, meets the General Education requirement in Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

**Sociology 157. Mapping and Analyzing Social Patterns in Greater Boston - (New Course)**
Catalog Number: 88434 Enrollment: Limited to 30.
Daniel T. O’Brien

*Half course (fall term). M., W., 2–3:30. EXAM GROUP: 7, 8*

Introduces the skills necessary to work with spatial data, with a focus on community-level variation in the greater Boston metropolitan area. Includes managing and visualizing data with ArcGIS (v.10) and analytical techniques designed to address complications with spatial data.

**Sociology 159. Social Entrepreneurship**
Catalog Number: 9611 Enrollment: Limited to 80.

*Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*

Focuses on the efforts of private citizens, for-profit and not-for-profit initiatives, to respond to social needs through creative solutions. Topics covered: defining social good, assessing market, philanthropy, and government responses; developing an organizational mission; recognizing specific opportunities for social improvement; forming an enterprise that responds to those opportunities; developing organizational funding strategies; evaluating performance; leading the enterprise; and creating positive and sustainable social value.

*Note: Expected to be given in 2013–14. Enrollment by lottery.*

**Sociology 160. Medicine, Health Policy and Bioethics in Comparative and Global Perspective: Conference Course**
Catalog Number: 3456

*Mary-Jo Del Vecchio Good (Medical School)*

*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*

Complements Sociology 162. Examines the culture and political economy of biomedicine and health care institutions in the US and internationally. Analysis of current debates on medical education and the new professionalism; clinical narratives, the medical imaginary and the biotechnical embrace; cultural diversity, disparities and inequalities in medical and mental health care; medical error and quality of care; just use of societal resources; and bioethical dilemmas in clinical practice, medical missions and interventions, and international research and health policies.

*Note: Expected to be given in 2013–14.*

**Sociology 161. Globalization**
Catalog Number: 55428

*Half course (spring term). M., W., at 11. EXAM GROUP: 4*

Focuses on the development of global capitalism and the relationship between markets, the state, and civil society. The course will pay particular attention to power and inequality, and to various forms of resistance against globalization.

*Note: Expected to be given in 2013–14.*
**Sociology 164. Successful Societies: Markers and Pathways**  
Catalog Number: 64978  
Michèle Lamont and Peter Hall  
*Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16*

Analyzes the markers of societal success and the social conditions that sustain it. Discusses various indicators ranging from the standard economic measures to the human development index, inequality, resilience to shocks, educational, child development and health measures. Considers the role of cultural and institutional buffers (how cultural repertoires and myths feed strong collective identities, cultural and institutional supports for coping with stigma, models of citizenship and immigration, and multi-level governance and their impact on welfare and poverty). Similarly addresses factors that present major challenges, or ‘wicked problems,’ like concentrated urban poverty, well-being of indigenous and other racialized groups and some of the solutions attempted. Particular attention will be put on the United States, Canada, and other advanced industrial societies and to the role of space, institutions, and culture in shaping the conditions for successful societies. Public policy implications will also be discussed.

**Sociology 165. Inequalities in Health Care**  
Catalog Number: 8272  
Mary Ruggie (Kennedy School)  
*Half course (fall term). M., W., at 1. EXAM GROUP: 6*

Asks why certain social groups are at greater risk for more severe health problems (e.g., infant mortality, HIV/AIDS, cancer) and yet receive unequal health care in the US. Examines what best practices foster adequate delivery of healthcare services, mutual respect between patient and provider, and healthy living. Considers the role of government, the private sector, family and community.  
*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

[Sociology 166. Sociology of Poverty]  
Catalog Number: 49285 Enrollment: Limited to 35.  
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*Half course (spring term). Tu., Th., at 2. EXAM GROUP: 16*

Examines sociological research on poverty and inequality and engages current debates about the causes and consequences of poverty and inequality in the U.S. and other advanced industrialized countries. Explores policy approaches to reducing poverty and inequality.  
*Note:* Expected to be given in 2013–14.

**Sociology 169. Negotiation and Conflict Transformation for Policy and Practice - (New Course)**  
Catalog Number: 17367  
Kimberlyn Rachael Leary (Medical School)  
*Half course (spring term). Tu., 3–5. EXAM GROUP: 17, 18*

Applies negotiation frameworks to a rich array of cases about community organizing, health care reform, social enterprise ventures, and diplomacy, including cases that students will share from their own research and field study. The course will enable students to be more reflective about large-scale conflicts, organizational and neighborhood tensions, and everyday experiences of
dispute and enmity. Students will also engage in a series of lab exercises and negotiation simulations that will permit them to extend their relational problem-solving skills.

**Sociology 170. Culture and Networks** - *New Course*
Catalog Number: 65007
Bart Bonikowski
*Half course (spring term). Tu., Th., at 10; Tu., at 1; Tu., at 4. EXAM GROUP: 12*
This course will serve as an overview of the growing field of network research with a particular focus on how patterns of social interaction shape and are themselves shaped by cultural preferences and meaning-making processes. We will discuss a variety of substantive topics, including musical tastes, romantic relationships, organizational collaboration and competition, and social movement mobilization, while paying particular attention to the increasingly important role of social media in establishing and maintaining social ties.

**Sociology 172. Crime, Journalism and Law**
Catalog Number: 51199
Cory Theodore Way
*Half course (spring term). M., 1 to 3 and weekly section. EXAM GROUP: 6, 7*
Crime narratives have dominated news and entertainment since the beginning of mass communication. This course examines the prominence of crime narratives in Anglo-American societies in various media formats. We will explore why crime has been consistently compelling to societies and citizens, and how these narratives have been harnessed to advance religious, political, governmental and ideological objectives. We will then study the power of mass communication and the impact that crime events can have on societies and their legal systems. We will conclude by examining what responsibilities (if any) media organizations, individual journalists, media consumers, state officials and the legal system should assume when producing, consuming and otherwise engaging highly publicized crime events.

**Sociology 174. Contemporary Central Asia and the Caucasus**
Catalog Number: 5060
Laura L. Adams and Robyn E. Angley
*Half course (fall term). Tu., Th., 11:30–1.*
An introduction to the post-Soviet societies of Central Asia and the Caucasus (Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). Explores topics such as religion, politics, civil society, globalization, gender, ethnicity, migration, and culture.

**Sociology 175. Sociology of Immigration**
Catalog Number: 76736
Justin Gest
*Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16*
This course examines global migration and the sociopolitical responses of national communities to this phenomenon. In the first half of the course, students consider the process of international migration, and the dynamics of immigration policy, border control and citizenship. In the second half, students address contemporary approaches to settlement, integration and political incorporation. The course concludes by evaluating the impact of transnational affiliations and
supranational governance on a process that conventionally has been overseen by national authorities. At hand each week are some of the great social and political debates confronting American society and many other countries today.

[Sociology 178. Social Network Analysis: Theory, Methods and Applications]
Catalog Number: 54236

Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
Interests in social network analysis have exploded in the past few years. Aimed to examine social relationships and interactions from a structural perspective, social network analysis has become an essential tool for us to understand and address a variety of social issues, including friendship formation, peer influence, career mobility, socioeconomic inequality, organizational alliance and competition, economic development, international trade, diffusion of innovations, political mobilization, crime proliferation, spreading of diseases, etc. This course covers the basic concepts and theory in social network analysis, and major approaches and methods to collect, represent, visualize and analyze social network data. Students will also have the opportunity to learn using the mainstream software in social network analysis to conduct their own research on social networks.

Note: Expected to be given in 2013–14.

Sociology 179. Crime, Justice, and the American Legal System
Catalog Number: 3962
Cory Theodore Way

Half course (fall term). M., 2–4; . EXAM GROUP: 7, 8
Explores the causes and consequences of crime in society. Critically examines the role of key players in the American criminal justice system, including police, politicians, judges, lawyers, offenders, victims and the media. Considers historical, political and sociological dimensions of controversial issues in criminal justice practice and policy.

Sociology 180. Law, Science, and Society in America - (New Course)
Catalog Number: 38367
Sheila Jasanoff (Kennedy School)

Half course (spring term). M., W., at 10; F., at 10; Th., at 2. EXAM GROUP: 3
This course explores the tensions, contradictions, and mutual appropriations that characterize the relationship between law, science, and technology in America. It examines how ideas of evidence, expertise, and public reason have changed over the past half-century in response to such phenomena as the rise of the risk society, environmentalism, patient advocacy, and the information revolution. Law is broadly construed to include the activities of legislatures, regulatory agencies, and courts. The course seeks to contextualize the interactions of law, science, and technology in relation to wider transformations in US culture and society.

Note: Offered jointly with the Kennedy School as IGA-516.

Sociology 183. Race and Ethnic Relations
Catalog Number: 70535
Lawrence D. Bobo

Focuses on ethno-racial distinctions as they have played out in the US, particularly in the period from post-World War II to the present. The specific topics covered include the concept of race itself, whiteness and white identity, sociological theories of racial and ethnic stratification, immigration and immigration politics, processes of assimilation, new and changing ethno-racial identities, and racial attitudes. In the process of addressing these large and cross-cutting topics we will also take up a host of related issues dealing with such matters as income and wealth differentials, schooling and its outcomes, crime and incarceration, families, interracial marriages, and racism and antiracism.

**Sociology 187, Nationalism and Society - (New Course)**

Catalog Number: 76364

*Ben Herzog*

*Half course (fall term). W., 1–3. EXAM GROUP: 6, 7*

The western geopolitical imagination maintains that institutions and organizations (the state), culture (the nation), society and the economy must perfectly overlap. Although no state exists in which the four elements truly overlap, as a subjective cultural frame, nationalism still provides a political formula for organizing the world. The clash between the perceived model (nationalism) and the social reality will be the subject of this course. We will look at the construction of Nationalism and at its manifestations in every-day life and in popular culture.

**Sociology 190, Life and Death in the US: Medicine and Disease in Social Context**

Catalog Number: 0021

*Nicholas A. Christakis (Medical School, FAS)*

*Half course (spring term). M., W., at 3; sections TBA. EXAM GROUP: 8*

Explores how biological and social factors jointly conspire to determine the health of individuals and populations. Examines how medical care, social networks, and socioeconomic inequality influence illness, recovery, and death.

*Note:* This course, when taken for a letter grade, meets the General Education requirement for United States in the World or the Core area requirement for Social Analysis.

**Sociology 197, Democratic Citizenship in the Modern World - (New Course)**

Catalog Number: 24842

*Ben Herzog*

*Half course (spring term). W., 1–3. EXAM GROUP: 6, 7*

Can states torture their own citizens? What protection should be offered by diplomatic or consular representatives abroad? Can a citizen renounce her citizenship to avoid taxes or military service? Should citizenship be granted to children of illegal immigrants who are born in the US? What tie is stronger — marriage or citizenship? In this course we will try to understand such practical contemporary dilemmas by looking at the theoretical underpinning of democratic citizenship. Then we will compare, in theory and in practice, the model of national citizenship to the current alternatives of political allegiances around the world.

**Cross-listed Courses**

*African and African American Studies 115, HBO’s The Wire and its Contribution to Understanding Urban Inequality***

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1342
**African and African American Studies 197. Poverty, Race, and Health**

**History of Science 157. Sociology of Science**

**Studies of Women, Gender, and Sexuality 1168. Education, Race, and Gender in the United States**

**Primarily for Graduates**

**Sociology 202. Intermediate Quantitative Research Methods**
Catalog Number: 4117
Jason Beckfield
*Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13*
Research designs and measurement techniques used in quantitative sociological research. Regression methods for continuous and binary response variables, including categorical predictors, nonlinearity interactions, diagnostics, and criticism. Emphasis on applications and implementation.
*Note:* Required of, and limited to, first-year graduate students in Sociology
*Prerequisite:* Familiarity with basic statistics.

**Sociology 203a. Advanced Quantitative Research Methods**
Catalog Number: 3315
Christopher Winship
*Half course (fall term). Tu., Th., 10–12.*
Matrix approach to regression analysis with an emphasis on the assumptions behind OLS. Instrumental variables, generalized least squares, probit and logit models, survival analysis, hierarchical linear models, and systems of equations are studied.
*Note:* Required of, and ordinarily limited to, second-year graduate students in Sociology.
*Prerequisite:* Sociology 202 or basic course in regression analysis.

**Sociology 203b. Analysis of Longitudinal Data: Seminar**
Catalog Number: 1860
Alexandra Achen Killewald
*Half course (fall term). Th., 4–6.*
This course takes an applied approach to the analysis of longitudinal data. Lectures will provide an overview of a variety of techniques, including fixed effects models, multilevel models, and duration models. Students will develop their own empirical projects and receive support as they begin to work with longitudinal datasets.
*Note:* Primarily for graduate students in sociology.

**Sociology 204. Classical Social Theory**
Catalog Number: 6189
Adam B. Seligman
*Half course (fall term). M., 9–11. EXAM GROUP: 2, 3*
Introduction to the formative ideas and socio-intellectual contexts of 19th and early 20th century sociological theory. Course will explore social thought from the perspective provided by the problem of social order - and the roles different thinkers attributed to such factors as solidarity, power, and meaning as solutions to this problem. Consideration of the continuing significance of
these ideas for contemporary social thought.  
*Note: Required of and limited to first-year graduate students in Sociology.

*Sociology 205. Sociological Research Design  
Catalog Number: 8972  
Jocelyn Viterna  
*Half course (fall term). W., 10–12. EXAM GROUP: 3, 4  
This course covers the fundamentals of sociological research design. Emphasis is placed on principles that are applicable in all kinds of sociological research, including surveys, participant observation, comparative historical study, interviews, and quantitative analysis of existing data. The course also delves into current methodological controversies in several arenas.  
*Note: Required of, and ordinarily limited to, first-year graduate students in Sociology.

[Sociology 206. The Sociology of Development: Seminar]  
Catalog Number: 9026  
Martin K. Whyte  
*Half course (spring term). Tu., 1–3.  
Examines debates surrounding the nature of the process of economic development. Major attention is devoted to rival theories of where and why development occurs and to a variety of social consequences of economic development.  
*Note: Expected to be given in 2013–14.

*Sociology 208. Contemporary Theory and Research: Seminar  
Catalog Number: 6080  
Mary C. Brinton  
*Half course (spring term). Th., 10–12. EXAM GROUP: 12, 13  
Covers the development of sociology as a discipline in the US and the rise of distinct schools of sociological theory. Assesses the role of mechanisms in sociological theory and explores the use of theory in empirical research.  
*Note: Required of and limited to second-year graduate students in Sociology.

*Sociology 209. Qualitative Social Analysis: Seminar  
Catalog Number: 1198  
Michèle Lamont  
*Half course (spring term). W., 9–11. EXAM GROUP: 2, 3  
Examines approaches to non-numerical data used by social scientists to obtain valid, reliable, and meaningful insight into the social world through the analysis of ethnographic field notes, interview transcripts, and archival and other interpretative data.  
*Note: Required of and limited to first-year graduate students in Sociology.

[*Sociology 217. Sociology of Families and Kinship: Seminar]  
Catalog Number: 8522  
Martin K. Whyte  
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16  
Examines research on family patterns, combining a focus on how family patterns vary and change over time and how individuals differ in their experience of life course transitions, such as
marriage, divorce, and retirement.

Note: Expected to be given in 2013–14.

[*Sociology 221. Immigration, Identity and Assimilation: Seminar]*
Catalog Number: 9699
Mary C. Waters
Half course (fall term). W., 12–2. EXAM GROUP: 5, 6
Examines the experiences of recent immigrants and their children — the second generation. Review of economic, political, and social assimilation, and ethnic identity formation. Discussion of recent theories and research on the link between identity and economic assimilation.

Note: Expected to be given in 2013–14.

*Sociology 223. American Society and Public Policy: Research Seminar - (New Course)*
Catalog Number: 15067 Enrollment: Limited to 16.
Theda Skocpol and Mary C. Waters
Half course (fall term). Tu., 1–3.
Explores growing inequality in the U.S., and its implications for public policy in the areas of social support for families and workers, immigration and citizenship, and access to higher education. Students are expected to develop and present their own research.

*Sociology 224. Organizational Analysis: Seminar*
Catalog Number: 8202
Christopher Marquis (Business School)
Half course (spring term). Tu., 2–5. EXAM GROUP: 16, 17, 18
Reviews classical and contemporary theories of organizations, including ecological, institutional, resource dependence, transaction-cost, agency theory, networks and social movements. Examines phenomena at multiple levels from the establishment to the organizational network or field.

Note: Offered jointly with the Business School as HBS 4880.

[*Sociology 226. The Sociology of Culture]*
Catalog Number: 30907
Orlando Patterson
Half course (fall term). Th., 2–4.
Note: Expected to be given in 2013–14.

[Sociology 234. Ethnographic Fieldwork]*
Catalog Number: 34764
Matthew Stephen Desmond
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
This seminar is about the practice, politics, and poetics of ethnographic fieldwork--the method of immersing oneself into people’s daily routines and systematically recording social processes as they unfold in real time. Along with engaging with several classic and contemporary texts, participants will collect, analyze, and argue with ethnographic data.

Note: Expected to be given in 2013–14.
**Sociology 235. Advanced Qualitative Methods - (New Course)**
Catalog Number: 80114  
Tamara Kay  
*Half course (spring term). Th., 2–4.*  
Explores qualitative research methods with a focus on interviewing, case studies, comparative case analysis, and ethnography, and with particular attention to international/transnational research. Geared towards students who are conducting fieldwork and/or collecting data.  
*Prerequisite:* Intended for students who have already taken sociology 209 or its equivalent.

[*Sociology 236. Selected Topics in Culture and Inequality*]
Catalog Number: 0582  
Michèle Lamont  
*Half course (spring term). Hours to be arranged.*  
Introduction to cultural sociology, particularly as it intersects with the study of inequality. Topics: Symbolic boundaries, cultural capital, cultural consumption, identity, race and class cultures, anti-racism, cultural repertoires, explanation, interpretation, and comparative research strategies.  
*Note:* Expected to be given in 2013–14.

**Sociology 237. Contemporary Chinese Society: Seminar**
Catalog Number: 4320  
Martin K. Whyte  
*Half course (fall term). Tu., 1–3. EXAM GROUP: 15, 16*  
A seminar devoted to the intensive analysis of a particular aspect of contemporary Chinese society. This year the focus will be on trends in inequality and stratification in China.

[**Sociology 239. Just Institutions (Graduate Seminar in General Education)**]
Catalog Number: 38797  
Christopher Winship  
*Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*  
Examines the normative, psychological, and sociological underpinnings needed to develop and maintain social institutions that are considered "just". The seminar will design and develop a General Education course for undergraduates.  
*Note:* Expected to be given in 2013–14.

**Sociology 243. Economic Sociology**
Catalog Number: 2022  
Frank Dobbin  
*Half course (spring term). F., 2–4. EXAM GROUP: 7, 8*  
Introduction to economic sociology at the graduate level. Surveys the institutional, network, power, and cognitive approaches to explaining the structure and practices found in firms, markets, and national economies.

**Sociology 248. Race, Politics, and Social Inequality: Seminar**
Catalog Number: 8035  
Lawrence D. Bobo
Half course (spring term). W., 1–3.
Examines intersection of race, public will, and policy-making. Reviews theories of race-making and racial inequality, dynamics of public opinion, and effects of a racialized public sphere on social policy. Focuses on the welfare state, the criminal justice system, and the dynamics of a multiethnic society.

**Sociology 254. Social Structure and Culture in the Study of Race and Urban Poverty**
Catalog Number: 80085
William Julius Wilson
Half course (spring term). Th., 2–4. EXAM GROUP: 16, 17
The purpose of this course is to critically examine current writings and debates on how social structure and culture affect the social outcomes of the African Americans and immigrants in the US. The relevance of these works for public and social policy will also be discussed.
Note: Offered jointly with the Kennedy School as SUP-207 (Formerly AAAS 211)

*Sociology 255. Social Stratification: Seminar*
Catalog Number: 3839
Alexandra Achen Killewald
Half course (spring term). M., 2–4. EXAM GROUP: 7, 8
This graduate level seminar surveys contemporary research in the field of social stratification. We will discuss competing explanations of and empirical scholarship on the emergence, historical evolution and cross-national variation of social inequalities.

**Sociology 263. Historical Sociology: Cultural and Institutional Perspectives**
Catalog Number: 82536
Orlando Patterson
Half course (spring term). Th., 4–6. EXAM GROUP: 18
The seminar examines selected major problems in the origins, development and consequences of capitalism both in and out of the West. Among the topics explored are: merchant capital in the late medieval and renaissance periods; institutional factors in the rise of Western capitalism; honorific individualism in the making of modern Japanese culture; colonialism and the institutional origins of development and underdevelopment; the role of religion, slavery and freedom; civility, aesthetic publics and emergent modernities; gender, sexuality and familial change. Our readings and discussions will be guided by the recurring theoretical problems of causality, origins, continuity and change in institutional and cultural processes.

**Sociology 267. Political Sociology**
Catalog Number: 42489
Bart Bonikowski
Half course (fall term). Th., 2–4.
This course examines power relations between (and within) society and the state. We will focus on nation-state formation, revolutions, social movements, ideology and political attitudes, welfare state policies, and globalization, while interrogating the major theoretical traditions that have shaped the sociological study of politics.
*Sociology 275. Social Network Analysis: Seminar*
Catalog Number: 6899
Peter V. Marsden

Half course (fall term). F., 10–12. EXAM GROUP: 3, 4
Concepts and methods for studying social structure using social networks. Approaches to collecting network data; data quality; graph-theoretic, statistical, and visual approaches to analyzing network data, including blockmodels and multidimensional scaling.

*Sociology 296a. Proseminar on Inequality & Social Policy I*
Catalog Number: 67293
Kathryn Edin (Kennedy School) and Christopher Jencks (Kennedy School)

Half course (fall term). W., 2–4. EXAM GROUP: 7, 8
Considers the effects of policies and institutions in creating or reducing inequality in the U.S. and other advanced democracies, as well as the reciprocal effects of inequality on political activity and policy choices.

*Note:* Offered jointly with the Kennedy School as SUP-921.

**Cross-listed Courses**

*Government 2340b. Social Policy II*
[*Psychology 2630. Social Behavior in Organizations: Seminar*]

**Graduate Courses of Reading and Research**

[*Sociology 300hf (formerly *Sociology 300). Workshop on Race: Black Youth Culture*]
Catalog Number: 6654
Orlando Patterson 1091

Half course (throughout the year). F., 12–2.
A venue for graduate students and advanced scholars working on all aspects of minority-majority relations, the condition of Afro-Americans and other disadvantaged ethnic groups, and the evaluation of related public policies and programs.

*Note:* Expected to be given in 2013–14.

*Sociology 301. Special Reading and Research*
Catalog Number: 4017
David L. Ager 5142, Jason Beckfield 5612, Lawrence D. Bobo 2919, Mary C. Brinton 4567, Nicholas A. Christakis 4459, Frank Dobbin 4622, Kathryn Edin (Kennedy School) 5952, Filiz Garip 5887, Mary-Jo Del Vecchio Good (Medical School) 7721, Christopher Jencks (Kennedy School) 2160, Tamara Kay 5611, Michele Lamont 4634, Stanley Lieberson 1937, Peter V. Marsden 1797, Orlando Patterson 1091, Robert J. Sampson 4546, Theda Skocpol 1387, Jocelyn Viterna 5860, Mary C. Waters 1498, Bruce Western 5763, Martin K. Whyte 3737 (on leave spring term), William Julius Wilson 2401, and Christopher Winship 3189 (on leave spring term)

Half course (fall term; repeated spring term). Hours to be arranged.
*Sociology 302. Direction of Doctoral Dissertations  
Catalog Number: 5021  
Members of the Department

*Sociology 303a. Advanced Topics in Quantitative Research  
Catalog Number: 5636  
Christopher Winship 3189 (on leave spring term)  
Half course (fall term; repeated spring term). W., 12–1:30. EXAM GROUP: 5, 6  
Examines current methodological scholarship in the social sciences with an eye to assessing its quality and potential for advancing quantitative methods. Recently published and unpublished work by local scholars examined.

*Sociology 304. Culture and Social Analysis Workshop  
Catalog Number: 2809  
Michèle Lamont 4634  
Half course (fall term; repeated spring term). M., 4–6.  
A venue for those working on topics such as meaning-making, identity, collective memory, symbolic boundaries, cultural capital, class cultures, popular culture, media, disciplinary cultures, and the impact of culture on inequality.

*Sociology 305. Teaching Practicum  
Catalog Number: 0259  
Jocelyn Viterna 5860  
Note: Required of and limited to graduate students in Sociology. Attendance at first meeting is required. Not repeatable for credit.

*Sociology 307. Proseminar on Inequality and Social Policy III  
Catalog Number: 0137  
Bruce Western 5763  
Students develop previously completed papers from Sociology 296a or 296b into professional presentations and publishable articles, critique peer papers across disciplines, and discuss presentations of national experts.  
Note: Offered jointly with the Kennedy School as SUP-923.  
Prerequisite: Sociology 296a and Gov 2340b (or SUP-921 and 922 at the Kennedy School)

*Sociology 308. Workshop on Economic Sociology  
Catalog Number: 0086  
Frank Dobbin 4622  
Half course (fall term; repeated spring term). W., 3:30–5.  
Presentations and discussions of new research by members of the community and visiting scholars. Students are exposed to the major paradigms in the field, and see how research articles are developed and refined.
*Sociology 309. Migration and Immigrant Incorporation Workshop
Catalog Number: 9932
Mary C. Waters 1498
Half course (spring term). Th., 12–2. EXAM GROUP: 14, 15
Bi-weekly colloquium for graduate students that examines international migration and the incorporation of migrants into host societies. Students participate in meetings and present original work in progress.

*Sociology 310. Qualifying Paper - (New Course)
Catalog Number: 40662
Matthew Stephen Desmond
Half course (fall term). F., 10–12.
Guides students through the process of producing an original research paper of high quality. Readings and discussion cover the identification of appropriate research problems, the nature of causal reasoning, and data analysis and write-up. 
Note: Required of, and ordinarily limited to, third-year graduate students while writing the qualifying paper. Not repeatable for credit.

[*Sociology 312. Workshop on Social Networks and Social Capital: Advanced Models and Empirical Applications]*
Catalog Number: 49871
Filiz Garip
Half course (fall term; repeated spring term). Th., 4–6. EXAM GROUP: 18
The workshop brings together quantitative sociologists working with advanced descriptive, computational, causal or network models to empirically analyze issues broadly related to social networks and social capital.
Note: Expected to be given in 2013–14. Class meets bi-weekly. First class, September 8, 2011.

*Sociology 314. Workshop on Urban Social Processes
Catalog Number: 16972
Robert J. Sampson
Half course (fall term; repeated spring term). Th., 4–6. EXAM GROUP: 18
Forum for discussion of analytic sociological research on city and community. Covering a range of topics with a focus on social mechanisms, processes, and structures. The workshop aims to support the presentation of graduate student research but will also include discussion sessions on selected readings and work-in-progress by faculty at Harvard and colleagues around the country.
Note: First class, September 15, 2011.

*Sociology 315. Inequality and Social Policy: Seminar
Catalog Number: 65203
Bruce Western
Half course (fall term; repeated spring term). M., 12–2.

*Sociology 317. Culture, History and Society
Catalog Number: 84118
Orlando Patterson
Half course (fall term; repeated spring term). F., 12–2.
Note: Class meets bi-weekly. First class meeting is September 7, 2012.

*Sociology 320. Workshop on Sociology of Education
Catalog Number: 18817
Mary C. Brinton
Half course (fall term; repeated spring term). Tu., 12–2.
A forum for students and faculty across the university interested in the sociology of education, primarily for the discussion of research in progress. Domestic and comparative topics welcome. Meets bi-weekly, Fall and Spring.
Note: First class meeting for fall term is September 4, 2012.

*Sociology 390. Health and Social Structure
Catalog Number: 6282
Nicholas A. Christakis 4459
Full course. Th., 1–2:30.
Considers advanced topics in how supra-individual factors, such as social networks, neighborhoods, and health care organizations, contribute to individual health and longevity. Students develop and present original research plans and research.
Note: Course meets at Harvard Medical School.

Cross-listed Courses

*Government 3004. Research Workshop in American Politics

South Asian Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of South Asian Studies

Parimal G. Patil, Professor of Religion and Indian Philosophy (Chair)
Ali S. Asani, Professor of Indo-Muslim and Islamic Religion and Cultures
Homi K. Bhabha, Anne F. Rothenberg Professor of the Humanities
Sugata Bose, Gardiner Professor of Oceanic History and Affairs
Richard S. Delacy, Preceptor in Hindi and Urdu
Diana L. Eck, Fredric Wertham Professor of Law and Psychiatry in Society
Jay Jasanoff, Diebold Professor of Indo-European Linguistics and Philology
Jonathan Ripley, Preceptor in Tamil
Amartya Sen, Lamont University Professor
Sunil Sharma, Visiting Associate Professor of Hindi and Urdu
Harpreet Singh, College Fellow in the Department of South Asian Studies
Ajantha Subramanian, Professor of Anthropology
Leonard W. J. van der Kuijp, Professor of Tibetan and Himalayan Studies
Alex Watson, Preceptor in Sanskrit
Michael Witzel, Wales Professor of Sanskrit
Richard K. Wolf, Professor of Music (on leave 2012-13)

Other Faculty Offering Instruction in the Department of South Asian Studies

Francis X. Clooney, Parkman Professor of Divinity and Professor of Comparative Theology (Divinity School)
Janet Gyatso, Hershey Professor of Buddhist Studies (Divinity School)
Anne E. Monius, Professor of South Asian Religions (Divinity School)

Affiliates of the Department of South Asian Studies

Asad A. Ahmed, Associate Professor of Anthropology (on leave 2012-13)
Prerna Singh, Assistant Professor of Government (on leave 2012-13)

Graduate students in the Faculty of Arts and Sciences may enroll in certain foreign language courses for the grade of Sat/UNS. Students should consult with course heads to determine if a course is offered on that basis. For further information and updates, please visit our website: www.sas.fas.harvard.edu.

South Asian Studies

Primarily for Undergraduates

*South Asian Studies 91r. Supervised Reading and Research
Catalog Number: 26727
Parimal G. Patil and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading leading to a long term paper in a topic or topics not covered by regular courses of instruction.
Note: A graded course. Offered at the discretion of the individual instructors.

*South Asian Studies 98r. Tutorial—Junior Year
Catalog Number: 93356
Parimal G. Patil and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Required of concentrators in the South Asian Studies option.

*South Asian Studies 99r. Tutorial—Senior Year
Catalog Number: 41834
Parimal G. Patil and members of the Department

Full course (indivisible). Hours to be arranged.

Note: Required of concentrators in the South Asian Studies option.

Cross-listed Courses

[Aesthetic and Interpretive Understanding 30 (formerly Literature and Arts A-92). Love In A Dead Language: Classical Indian Literature and Its Theorists]
[Aesthetic and Interpretive Understanding 54 (formerly Culture and Belief 12). For the Love of God and His Prophet: Religion, Literature, and the Arts in Muslim Cultures]
Culture and Belief 19 (formerly Foreign Cultures 70). Understanding Islam and Contemporary Muslim Societies
Culture and Belief 25 (formerly Religion 70). Studying Buddhism, Across Place and Time
[Culture and Belief 28. Hindu Worlds of Art and Culture]
[*History 86d. The Indian Ocean in Comparative Perspective]
[*History 86e. Nation, Reason and Religion in South Asia]
[*History 86f. Tagore and his Times]
*History 86h. Asia after Europe - (New Course)
Religion 11. World Religions Today
Societies of the World 36 (formerly Historical Study A-16). Modern India and South Asia
Societies of the World 47. Contemporary South Asia: Entrepreneurial Solutions to Intractable Social & Economic Problems

For Undergraduates and Graduates

*South Asian Studies 100r. South Asian Language Tutorials
Catalog Number: 78249
Parimal G. Patil and members of the Department
Half course (fall term; repeated spring term). Hours to be Arranged. EXAM GROUP: Fall: 4, 11
Individualized study of a South Asian language; emphasis on written expression, reading comprehension and oral fluency. Language currently offered is Bengali though others may be approved upon petition to the Director of Undergraduate Studies/Director of Graduate Studies. Note: Not open to auditors.

Catalog Number: 6828 Enrollment: Limited to 20.
Richard S. Delacy
Half course (spring term). Th., 3–6. EXAM GROUP: 17, 18
This course examines concepts of personhood, community and culture in South Asia as expressed in contemporary film and literature. Works in Hindi-Urdu and in translation will be examined with emphasis on language as an index of cultural difference and of broad social shifts, notably the transformation of audiences from citizens to culture-consumers. Knowledge of Hindi-Urdu is not required. However, there will be a section for students with intermediate
proficiency utilizing language materials.

*Note:* Students who enroll in the language section of this course may count it towards a citation in Urdu-Hindi.

**South Asian Studies 124 (formerly Indian Studies 124). Introduction to World Mythology**
Catalog Number: 62478
Michael Witzel
Half course (spring term). Th., 10-11:30, and an additional hour to be arranged. EXAM GROUP: 12, 13
The course discusses current and past approaches to comparative mythology and explores the new field of historical comparative mythology. Close interdisciplinary attention is given to genetics, linguistics and archaeology, and an outline of the development of mythologies from the late Stone Age until the rise of current world religions is presented.

**South Asian Studies 150. Workshop on Pilgrimage: The Kumbha Mela - (New Course)**
Catalog Number: 88766
Diana L. Eck
Half course (fall term). M., 3–5. EXAM GROUP: 8, 9
A multi-disciplinary study of the largest Hindu pilgrimage, which will take place in January/February of 2013 in Allahabad attracting tens of millions of people. Consideration of the complexity and significance of the Mela from the standpoint of religious studies, anthropology, urban studies, public health, politics, and planning.

**South Asian Studies 190. Religious Nationalism and Ethnic Conflict in Modern South Asia - (New Course)**
Catalog Number: 13053
Harpreet Singh
Half course (fall term; repeated spring term). Fall: Tu., Th., 10–11:30; Spring: M., 3–5. EXAM GROUP: Fall: 12, 13
What prompts a person with a family to pick up a gun and join a militia? What drives a democratic state to engage in indiscriminate violence and pogroms against its own citizens? Why do people frequently see George Washington as a "freedom fighter" but insurgents in Kashmir as "terrorists"? This course will consider such questions in the context of religious and ethnic conflict in modern South Asia. Using case studies of violent conflicts in one of the most militarized regions of the world, we will discuss the historical trajectory and dialectical interplay between different forms of nationalism led by Hindus, Muslims, Sikhs and Nagas in the colonial and post-colonial periods. Materials to be examined will be drawn from a wide range of sources, from theoretical texts and human rights reports to ethnographic accounts and films.

*Note:* Offered jointly with the Divinity School as 3414. This course, when taken for a letter grade, meets the General Education requirement for Societies of the World.

**South Asian Studies 191. South Asian Literary Cultures: An Introduction - (New Course)**
Catalog Number: 73789
Harpreet Singh
Half course (spring term). Tu., 1–3.
In the beginning of the second millennium, a major literary transformation-vernacularization
occurred in South Asia. The focus of this course is this historical process that led to the
development of vernacular literary cultures. The goal of the course is to introduce students to a
range of north Indian literary genres in Awadhi, Brajbhasha, Panjabi, Sindhi and Urdu with an
emphasis on religious, political and regional identity, and the ways in which literary production
intersects with music and art of the region. All reading will be in English and no knowledge of
languages of the region is required.

*Note:* Offered jointly with the Divinity School as 3402.

**South Asian Studies 192. Contemporary Politics of South Asia’s Past** - *(New Course)*

*Catalog Number: 10061*

*Harpreet Singh*

*Half course (spring term). Hours to be arranged.*

This course will examine the highly contentious and controversial ways in which South Asia’s
past is used as a political tool. By examining the revision of history in its diachronic frame, we
will see how history is related to power and shapes the present. We will begin by tracing the
 genesis of "Aryan invasion" theory; examine the many uses of the story of Padmani by the
Mughals, British and Hindu nationalists; the retelling of Shivaji in Maratha, British and
contemporary sources, including television; and end the course by looking at the ways in which
the Ramayana has been reimagined in the evolving political landscape of South Asia from the
Gupta period to the present.

*Note:* Expected to be given in 2013–14. Offered jointly with the Divinity School as 3419.

**Cross-listed Courses**

**Anthropology 1656. Anthropology of Pakistan: Beyond the Headlines : seminar**

**Government 1255. The Politics of India**

**Linguistics 107 (formerly Linguistics 122). Introduction to Indo-European**

**Linguistics 168. Introduction to Germanic Linguistics**

**Music 190gw (formerly Music 190rs). South Indian Music**

**Persian 160r. Readings in Indo-Persian Classical Literature**

**Religion 1059. God, Hindu and Christian**

**Religion 1600. Introduction to the Hindu Traditions of India**

*Religion 1627. Hindu Ethics: Seminar*

**Religion 1636. Hinduism Through the Modern Novel**

**Religion 1655. Gandhi, Then and Now: Seminar**

**Religion 1661 (Spiritual Exercises: The Yoga Sutras in a Comparative Perspective). Yoga**

**Sutras in a Comparative Perspective**

*[Religion 1820 (formerly *Religion 1585). Muslim Societies in South Asia: Religion,*

**Culture, and Identity]*

**Primarily for Graduates**

**South Asian Studies 223 (formerly Indian Studies 223). Indian History up to 1200 CE**

*Catalog Number: 82585*

*Michael Witzel*

*Half course (spring term). Hours to be arranged.*
Outline of the major cultural, religious and political developments, from the first human settlement around 65,000 CE. Concentrates on Indus civilization, the Vedic age, the pan-Indian Maurya empire, the interregnum up to the Guptas empire, the regional power centers of the Middle Ages.

*Note:* Expected to be given in 2013–14.

**South Asian Studies 224 (formerly Indian Studies 224). Rebirth and Karma**

*Catalog Number: 40633*

*Michael Witzel*

*Half course (fall term). Th., 10–12.*

Discusses the origin and development of the seminal Indian concepts of Rebirth and Karma as well as their eventual combination in the Upanishadic period. Follows some of their developments in the subsequent texts and beliefs of the past 2500 years.

**South Asian Studies 225 (formerly Indian Studies 225). South Asia through its Regions: Comparison of the Himalayan region with Tamil Nadu -(New Course)*

*Catalog Number: 67351*

*Michael Witzel*

*Half course (fall term). Hours to be arranged.*

*Note:* Expected to be given in 2013–14.

**[South Asian Studies 226 (formerly Indian Studies 226). Indian Rites, Customs, and Beliefs]]*

*Catalog Number: 30936*

*Michael Witzel*

*Half course (spring term). Hours to be arranged.*

Focuses on little studied aspects of personal beliefs, customs followed in various parts of the subcontinent, and rites connected with them. Comparisons of Hindu and Muslim aspects, leading up to a picture of South Asian life style.

*Note:* Expected to be given in 2013–14.

**South Asian Studies 250r. Advanced Topics in Buddhist Philosophy - Conference Course - (New Course)**

*Catalog Number: 44296 Enrollment: Limited to 35.*

*Parimal G. Patil*

*Half course (fall term). Th., 3–6. EXAM GROUP: 17, 18*

A detailed treatment of specific topics in Indian Buddhist Philosophy. This term our focus will be the Buddhist theory of momentariness.

*Note:* Jointly offered with the Divinity School as 3568.

**Cross-listed Courses**

[Anthropology 2638. Political Anthropology of Colonial and Postcolonial South Asia]  
[Economics 2057. Rationality and Choice]  
[Economics 2085. Economics of Inequality and Poverty]  
**History 2692. Colonial and Post-Colonial Histories of South Asia: Seminar**
*Islamic Civilizations 241r. Approaches to Studying Indo-Muslim Culture and South Asian Islam
Linguistics 220r. Advanced Indo-European
Linguistics 221r. Workshop in Indo-European

Graduate Courses of Reading and Research

*South Asian Studies 302 (formerly *Indian Studies 302). Reading and Research
Catalog Number: 1405
Ali S. Asani 7739, Diana L. Eck 4514, Parimal G. Patil 4478, and Michael Witzel 1602

Nepali

For Undergraduates and Graduates

Nepali 101a. Introductory Nepali
Catalog Number: 8974
Michael Witzel and members of the Department
Half course (fall term). Th., F., at 9; Th., F., at 10.

Nepali 101b. Introductory Nepali
Catalog Number: 3039
Michael Witzel and members of the Department
Half course (spring term). Hours to be arranged.

Nepali 102a. Intermediate Nepali
Catalog Number: 8921
Michael Witzel and members of the Department
Half course (fall term). Hours to be arranged.

Nepali 102b. Intermediate Nepali
Catalog Number: 2720
Michael Witzel and members of the Department
Half course (spring term). Hours to be arranged.
This course is designed to provide students with a more sophisticated knowledge of Nepali grammar. Students will also have an opportunity to use Nepali language for communication purposes and will be able to analyze more complex sentence types than the ones taught in the introductory course.

Nepali 103a. Advanced Nepali
Catalog Number: 19267
Michael Witzel and members of the Department
Half course (fall term). Hours to be arranged.
A reading course in Modern Nepali Literature, suitable for students who have at least three years of Nepali learning. This course is designed to help students understand some of the complex literary materials composed in modern Nepali language. The students will have an opportunity to
read a wide variety of selected texts, understand the linguistic systems operative in those writings, and come up with their own informed understanding of them.

**Nepali 103b (formerly Nepali 104b), Advanced Nepali**
Catalog Number: 85896
Michael Witzel
Half course (spring term). Hours to be arranged.
A reading course in Modern Nepali Literature, suitable for students who have at least three years of Nepali learning. This course is designed to help students understand some of the complex literary materials composed in modern Nepali language. The students will have an opportunity to read a wide variety of selected texts, understand the linguistic systems operative in those writings, and come up with their own informed understanding of them.

**Nepali 104a, Readings in Modern Nepali Literature**
Catalog Number: 46805
Michael Witzel and members of the Department
Half course (fall term). Hours to be arranged.
A reading course in Modern Nepali Literature, suitable for students who have at least three years of Nepali learning. This course is designed to help students understand some of the complex literary materials composed in modern Nepali language. The students will have an opportunity to read a wide variety of selected texts, understand the linguistic systems operative in those writings, and come up with their own informed understanding of them.

**Nepali 104b, Readings in Modern Nepali Literature**
Catalog Number: 61912
Michael Witzel and members of the Department
Half course (spring term). Hours to be arranged.
A reading course in Modern Nepali Literature, suitable for students who have at least three years of Nepali learning. This course is designed to help students understand some of the complex literary materials composed in modern Nepali language. The students will have an opportunity to read a wide variety of selected texts, understand the linguistic systems operative in those writings, and come up with their own informed understanding of them.

**Nepali 105a, Development of Nepali Language and Literature: Contributions of Local Languages**
Catalog Number: 50945
Michael Witzel
Half course (fall term). Hours to be arranged.
Investigates the impact of the various non-Nepali speaking groups (janajati) on Nepali literature, as well as their linguistic contributions.

**Nepali 105b, Development of Nepali Language and Literature: Contributions of Local Languages**
Catalog Number: 66052
Michael Witzel
Half course (spring term). Hours to be arranged.
Investigates the impact of the various non-Nepali speaking groups (janajati) on Nepali literature, as well as their linguistic contributions.

**Pali**

*For Undergraduates and Graduates*

**Pali 101a. Introductory Pali**
Catalog Number: 4129  
Parimal G. Patil and members of the Department  
Half course (fall term). Hours to be arranged.  
Considered sacred by the Theravada Buddhist tradition of Sri Lanka, India and Southeast Asia, as it was held to convey the actual "words of the Buddha", Pali came to be used as an authoritative, cosmopolitan language throughout the Theravada world. Pali texts display a rich variety of genres, including some of the earliest extant Indian poetry. The course is geared toward allowing the student to read Pali texts as quickly as possible.  
*Note:* Offered jointly with the Divinity School as 4050.

**Pali 101b. Introductory Pali**
Catalog Number: 7320  
Parimal G. Patil and members of the Department  
Half course (spring term). Hours to be arranged.  
Continuation of Pali 101a.  
*Note:* Offered jointly with the Divinity School as 4051.

**Pali 102a. Intermediate Pali**
Catalog Number: 8376  
Michael Witzel and members of the Department  
Half course (fall term). Hours to be arranged.  
Developing the skills gained in Introduction to Pali, the student reads texts of greater linguistic complexity in a wide variety of genres. The choice of text can be influenced by the students’ particular interests. Where applicable, we will use the Pali commentarial tradition as a tool to understanding the texts, thus providing the student with access to this illuminating but challenging body of material.

**Pali 102b. Intermediate Pali**
Catalog Number: 7748  
Michael Witzel and members of the Department  
Half course (spring term). Hours to be arranged.  
Continuation of Pali 102a.  
*Prerequisite:* Pali 102a or equivalent.

**Pali 103r. Readings in Pali**
Catalog Number: 6985  
Michael Witzel and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged.
Sanskrit

Primarily for Undergraduates

*Sanskrit 91r. Supervised Reading and Research
Catalog Number: 5497
Parimal G. Patil and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading of texts in Sanskrit not covered by regular courses of instruction.
*Note: A graded course. Offered at the discretion of the individual instructors.

For Undergraduates and Graduates

Sanskrit 101a. Elementary Sanskrit
Catalog Number: 8140
Alex Watson
Half course (fall term). M., W., F., at 12. EXAM GROUP: 5
Introduction to Classical Sanskrit, the translocal language of intellectual life in South Asia for much of the last two millennia. This course provides the essential grammar and reading proficiency necessary to take up the language’s many rich literary traditions: scripture (*Upaniṣad*), epic (*Rāmāyaṇa* and *Mahābhārata*), poetry, Hindu and Buddhist philosophy, etc. After completing the textbook, we will read a narrative (*Hitopadeśa*) drawn from one of the most popular literary works in the pre-modern world.

Sanskrit 101b. Elementary Sanskrit
Catalog Number: 6892
Alex Watson
Half course (spring term). M., W., F., at 12. EXAM GROUP: 5
Continuation of Sanskrit 101a.

Sanskrit 102a. Intermediate Sanskrit I
Catalog Number: 4843
Parimal G. Patil and members of the Department
Half course (fall term). M., W., F., at 1. EXAM GROUP: 6
A reading course designed to give students the tools necessary for advanced study in Classical Sanskrit. Readings in epic (*itihāsa*) or narrative (*kathā*), poetry (*kāvya*) or systematic thought (*śāstra*) will introduce students to a variety of important genres and their distinctive conventions. A focus upon the Sanskrit tradition’s categories of analysis - grammatical, commentarial and prosodic - will enable students to begin to make sense of original Sanskrit texts as generations of the tradition’s own readers have.

Sanskrit 102b. Intermediate Sanskrit II
Catalog Number: 4916
Alex Watson
Half course (spring term). M., W., F., at 1; F., at 9. EXAM GROUP: 6
Continuation of Sanskrit 102a.
Sanskrit 104a. Introduction to the Rgveda: Readings I - (New Course)
Catalog Number: 14876
Michael Witzel and members of the Department.
Half course (fall term). Hours to be arranged.
Readings and discussions of the oldest Indian text.
Prerequisite: Reading knowledge of Sanskrit.

Sanskrit 104b. Introduction to the Rgveda: Readings II - (New Course)
Catalog Number: 25121
Michael Witzel and members of the Department.
Half course (spring term). Hours to be arranged.
Continuation of Introduction to the Rgveda: Readings I
Prerequisite: Reading knowledge of Sanskrit.

Primarily for Graduates

Sanskrit 200ar (formerly Sanskrit 212ar). Advanced Poetic Sanskrit
Catalog Number: 3658
Alex Watson
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
Selected readings from inscriptions and documents.

Sanskrit 200br (formerly Sanskrit 212br). Advanced Literary Sanskrit
Catalog Number: 3526
Parimal G. Patil
Half course (spring term). M., W., F., at 10. EXAM GROUP: 3

[Sanskrit 201ar. Advanced Philosophical Sanskrit]
Catalog Number: 9986
Parimal G. Patil
Topic to be announced.
Note: Expected to be given in 2013–14.

[Sanskrit 201br. Advanced Philosophical Sanskrit]
Catalog Number: 5965
Parimal G. Patil
Topic to be announced.
Note: Expected to be given in 2013–14.

[Sanskrit 214. Ritual Sutras]
Catalog Number: 6626
Michael Witzel
Half course (spring term). Hours to be arranged.
Reading and discussion of Sutras and Paddhatis.  
*Note*: Expected to be given in 2013–14.

[Sanskrit 216. Advanced Skt: Kashmir drama/Prahasana texts ]  
Catalog Number: 33768  
*Michael Witzel*  
*Half course (spring term). Hours to be arranged.*  
Reading of classical Sanskrit texts with a regional, Kashmiri flavor. Concentrates on comedy texts in early drama and verse compositions by Ksemendra.  
*Note*: Expected to be given in 2013–14.

[Sanskrit 217. Introduction to Vedic Studies: language and texts - (New Course) ]  
Catalog Number: 58445  
*Michael Witzel*  
*Half course (fall term). W., 4–6. EXAM GROUP: 9*  
Presents a history of Vedic texts and religion. Reading of pertinent texts from the period, 1200-500 BCE.

[Sanskrit 218. Advanced Skt: Upanisads - (New Course)]  
Catalog Number: 37137  
*Michael Witzel*  
*Half course (fall term). Hours to be arranged.*  
Reading and interpretation of the earliest philosophical texts against their Vedic background found in the Brahmana texts.  
*Note*: Expected to be given in 2013–14.

*Sanskrit 250r. Nth Year Sanskrit: Seminar - (New Course)*  
Catalog Number: 63939 Enrollment: Limited to 15.  
*Alex Watson*  
*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*  
An advanced course for students who have completed at least four years of formal Sanskrit instruction. Texts and topics will vary from year to year.

**Graduate Courses of Reading and Research**

*Sanskrit 301. Reading and Research*  
Catalog Number: 2158  
Francis X. Clooney (Divinity School) 1785, Diana L. Eck 4514, Anne E. Monius (Divinity School) 4489, Parimal G. Patil 4478, and Michael Witzel 1602

*Sanskrit 310. Direction of Doctoral Dissertations*  
Catalog Number: 4371  
Francis X. Clooney (Divinity School) 1785, Diana L. Eck 4514, Anne E. Monius (Divinity School) 4489, Parimal G. Patil 4478, and Michael Witzel 1602

**Tamil**
For Undergraduates and Graduates

Tamil 101a. Elementary Tamil
Catalog Number: 27362
Jonathan Ripley
Half course (fall term). M., W., F., at 11. EXAM GROUP: 4
is an introductory course to the oldest of the Dravidian languages of South India. Tamil has a rich and well-developed literary tradition that ranges from ancient classical poetry and medieval devotional compositions and epics to the present-day where the modern novel, short story and drama coexist with vibrant traditions of folk poetry and folk drama. Students will be introduced to the Tamil script and to reading, writing, and speaking the Tamil language and to basic elements of grammar. Materials from popular culture and the folk tradition will supplement modern teaching materials.

Tamil 101b. Elementary Tamil
Catalog Number: 93991
Jonathan Ripley
Half course (spring term). M., W., F., at 2. EXAM GROUP: 7
Continuation of Tamil 101a.

Tamil 102a. Intermediate Tamil
Catalog Number: 42469
Jonathan Ripley
Half course (fall term). M., W., F., at 9. EXAM GROUP: 2
This is a course in Second Year Tamil that will focus on reading, writing, and speaking the Tamil language at an Intermediate Level. Students will read Tamil essays, short stories, and published literature as well as materials from the Tamil folk tradition. There will also be a significant emphasis on using spoken and written Tamil. Tamil cinema and audiovisual materials presenting contemporary and traditional Tamil culture will be used as supplementary class material.

Tamil 102b. Intermediate Tamil
Catalog Number: 57576
Jonathan Ripley
Half course (spring term). M., W., F., at 9. EXAM GROUP: 2
Continuation of Tamil 102a.

Tamil 103a. Advanced Tamil
Catalog Number: 72683
Jonathan Ripley
Half course (fall term). M., W., F., at 1. EXAM GROUP: 6
This is a course in Third Year Tamil that will focus on reading, writing, and speaking the Tamil language at an Advanced Level. Students will begin the course with the reading of published short stories and essays and then move on to more advanced materials from journalistic, academic, and literary writing. Audiovisual materials from Tamil cinema, popular culture and the folk tradition will supplement modern teaching materials.
Tamil 103b. Advanced Tamil  
Catalog Number: 21161  
Jonathan Ripley  
Half course (spring term). M., W., F., at 11. EXAM GROUP: 4  
Continuation of Tamil 103a.

Thai

For Undergraduates and Graduates

*Thai 101a. Introductory Thai I  
Catalog Number: 5395  
Parimal G. Patil and members of the Department  
Half course (fall term). W., 6:30–8 p.m. EXAM GROUP: 9  
Note: Given in alternate years.

*Thai 101b. Introductory Thai II  
Catalog Number: 6557  
Parimal G. Patil and members of the Department  
Note: Given in alternate years.

*Thai 102a. Intermediate Thai I  
Catalog Number: 8582  
Parimal G. Patil and members of the Department  
Half course (fall term). Th., 8:30–10.  
A two-term continuation of the study of Thai at the intermediate level. Students build on acquired proficiency at the elementary level (or its equivalent) towards achieving more fluency in reading, speaking, writing, and listening comprehension of standard Thai, as well as in cultural-social skills. Introduces new vocabulary and grammar through communicative tasks and text readings, mainly using the situational-communicative methodology.  
Prerequisite: Successful completion of Elementary Thai (or equivalent) is required. Continuing students who did not take Introductory Thai, as well as new students, are encouraged to talk to the instructor prior to registration.

*Thai 102b. Intermediate Thai II  
Catalog Number: 3751  
Parimal G. Patil and members of the Department  
Half course (spring term). Hours to be arranged.  
Prerequisite: Thai 102a.

*Thai 103ar. Readings in Thai I  
Catalog Number: 7590  
Michael Herzfeld and members of the Department  
Half course (fall term). W., 12–1:30; M., 8:30–10. EXAM GROUP: 5, 6
2012-2013 Previous Courses of Instruction

*Thailand

**Thai 103. Readings in Thai II**
Catalog Number: 7593
Parimal G. Patil and members of the Department
Half course (spring term). Hours to be arranged.

**Graduate Courses of Reading and Research**

*Thai 300. Reading and Research*
Catalog Number: 5368
Parimal G. Patil 4478 and members of the Department

**Tibetan and Himalayan Studies**

**Primarily for Undergraduates**

**Tibetan 91r. Supervised Reading and Research**
Catalog Number: 2288
Leonard W. J. van der Kuijp
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading of texts in Tibetan not covered by regular courses of instruction.

**For Undergraduates and Graduates**

**Tibetan 101a. Elementary Classical Tibetan**
Catalog Number: 4132
Leonard W. J. van der Kuijp and members of the Department
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 13

**Tibetan 101b. Elementary Classical Tibetan**
Catalog Number: 5299
Leonard W. J. van der Kuijp and members of the Department
Half course (spring term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11
Prerequisite: Tibetan 101a.

**Tibetan 102a. Intermediate Classical Tibetan**
Catalog Number: 9088
Leonard W. J. van der Kuijp and members of the Department
Half course (fall term). Hours to be arranged.
An intermediate classical Tibetan course emphasizing reading and translation of various Tibetan texts covering different genres, such as religious history, biography of Tibetan masters and folk literature writings. Please check the course website for the most updated information.
Prerequisite: Tibetan 101a and 101b or equivalent courses.

**Tibetan 102b. Intermediate Classical Tibetan**
Catalog Number: 8580
Leonard W. J. van der Kuijp and members of the Department
Half course (spring term). Hours to be arranged.
Continuation of 102a.
Prerequisite: 101a, 101b or equivalent courses.

**Tibetan 104ar. Elementary Colloquial Tibetan**
Catalog Number: 4158
Leonard W. J. van der Kuijp and members of the Department
Half course (fall term). M., W., F., at 3.

**Tibetan 104br. Elementary Colloquial Tibetan**
Catalog Number: 7026
Leonard W. J. van der Kuijp and members of the Department
Half course (spring term). M., at 5 and W., F., at 3. EXAM GROUP: 8, 9
Continuation of Tibetan 104ar.

**Tibetan 105ar. Intermediate Colloquial Tibetan**
Catalog Number: 1314
Leonard W. J. van der Kuijp and members of the Department
Half course (fall term). M., W., F., at 4. EXAM GROUP: 9

**Tibetan 105br. Intermediate Colloquial Tibetan**
Catalog Number: 1151
Leonard W. J. van der Kuijp and members of the Department
Half course (spring term). M., W., F., at 4. EXAM GROUP: 9

**Tibetan 106ar. Advanced Colloquial Tibetan**
Catalog Number: 7094
Leonard W. J. van der Kuijp and members of the Department
Half course (fall term). Hours to be arranged.
Prerequisite: Tibetan 101 and 102, or equivalent.

**Tibetan 106br. Advanced Colloquial Tibetan**
Catalog Number: 5352
Leonard W. J. van der Kuijp and members of the Department
Half course (spring term). Hours to be arranged.
Prerequisite: Tibetan 101 and 102, or equivalent.

**Cross-Listed Courses**

[Religion 1705 (Buddhism in Tibet). Tibetan Buddhism]

**Primarily for Graduates**

**Tibetan 219r. Tibetan Religious Literature: Seminar**
Catalog Number: 9500
Janet Gyatso (Divinity School)
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
An intermediate to advanced reading class on Tibetan religious literature. The topic will concern the ethical and metaphysical training of persons. Readings will be chosen from the writings of Rong-zom Chos-bzang (11th century) and Klong-chen Rab’-byams-pa (1308-1364). Reading knowledge of classical Tibetan is required.
Note: An intermediate to advanced reading class on Tibetan religious literature. Offered jointly with the Divinity School as 3831.
Prerequisite: At least one previous year of classical Tibetan is required.

[Tibetan 223b. The Life and Times of Dol po pa Shes rab rgyal mtshan (1292-1361), Part Two]
Catalog Number: 77048
Leonard W. J. van der Kuijp
Half course (spring term). Hours to be arranged.
Note: Expected to be given in 2013–14.

Tibetan 230. Readings in the Life of the Kashmirian Scholar Shakyashribhadra: Seminar
Catalog Number: 92097
Leonard W. J. van der Kuijp
Half course (spring term). F., 1–4. EXAM GROUP: 6, 7, 8
Various Tibetan biographies of the life of this influential scholar will be examined and special problem areas will be analyzed in full detail.
Prerequisite: Reading knowledge of Tibetan.

Tibetan 234. Readings in the Letters and Instructions of Spyan snga Grags pa byung gnas (1175-1255), abbot of Bri gung and Gdan sa mthil -(New Course)
Catalog Number: 46834
Leonard W. J. van der Kuijp
Half course (fall term). Tu., 1–4.

Tibetan 235. Introduction in reading traditional Tibetan archival (yig tshags) and government documents (gzhung yig)
Catalog Number: 79089
Leonard W. J. van der Kuijp
Half course (fall term). Th., 1–4.
This course is designed to introduce students to the vocabulary and grammar of two little studied genres of Tibetan literature called yig tshags and gzhung yig. We will be reading specimen of this literature that date from the thirteenth to the eighteenth centuries.

Graduate Courses of Reading and Research

*Tibetan 300. Reading and Research
Catalog Number: 0666
Leonard W. J. van der Kuijp 1556
Tibetan 302. Direction of AM Theses  
Catalog Number: 6927  
Leonard W. J. van der Kuijp 1556

Urdu and Hindi

Primarily for Undergraduates

*Urdu 91r. Urdu-Hindi Supervised Readings  
Catalog Number: 99557  
Ali S. Asani and Richard S. Delacy  
Half course (fall term; repeated spring term). Hours to be arranged.  
Instruction in Urdu Hindi in topics not covered in the regular curriculum.  
Note: Offered at the discretion of the instructors. Not open to auditors.

For Undergraduates and Graduates

Urdu 101. Introductory Urdu-Hindi  
Catalog Number: 4078  
Ali S. Asani and Richard S. Delacy  
Full course (indivisible). M. through Th., (F.), at 11. EXAM GROUP: 4, 13  
An introduction to the lingua franca of the subcontinent in its “Hindustani” form. Students are introduced to both the Perso-Arabic and the Devanagari script systems. Conventional teaching materials are supplemented by popular songs and video clips from Bollywood.  
Note: Not open to auditors.

Urdu 102. Intermediate Urdu-Hindi  
Catalog Number: 2941  
Richard S. Delacy  
Full course (indivisible). M., W., Th., at 9. EXAM GROUP: 2, 11  
Continuation of Urdu 101. Emphasis on written expression and texts in both Perso-Arabic and Devanagari script systems. Students are introduced to Urdu/Hindi fables, short stories, and various other genres of literature, including poetry.  
Note: Not open to auditors.  
Prerequisite: Urdu 101 or equivalent.

Urdu 103a. Advanced Urdu-Hindi  
Catalog Number: 0700  
Richard S. Delacy  
Half course (fall term). M., W., 10–12. EXAM GROUP: 3, 4  
Continuation of Urdu 102; covers topics in advanced grammar; designed to improve proficiency in speaking, listening, reading, and writing.  
Prerequisite: Urdu 102 or equivalent.

Urdu 103b. Advanced Urdu-Hindi  
Catalog Number: 4615
Richard S. Delacy

Half course (spring term). M., W., 3–5. EXAM GROUP: 8, 9
Continuation of Urdu 103a.

[Urdu 104. The Classical Urdu Ghazal and Its Symbolism: Seminar]
Catalog Number: 0927

Half course (fall term). Tu., 5:30–7:30 p.m. EXAM GROUP: 18
A survey of the popular literary genre including selections from poets such as Wali Dakkani, Siraj Aurangabadi, Mir Dard, Haidar Ali Atish, Mirza Ghalib, and others. Special attention to religious and mystical symbolism.
Note: Expected to be given in 2013–14.
Prerequisite: Urdu 102 or equivalent.

Urdu 105r. Topics in Urdu-Hindi Literature
Catalog Number: 5963
Sunil Sharma

Half course (fall term). Tu., at 5.
Individual reading course. A course for students with native or near-native proficiency with readings in a variety of genres from Urdu and/or Hindi literature based on student interest.

Urdu 106r. Advanced Oral Proficiency in Urdu-Hindi]
Catalog Number: 70789
Instructor to be determined

Half course (fall term; repeated spring term). Hours to be arranged.
A course intended to raise levels of oral proficiency for advanced students and consolidate command over complex grammatical structures. By the end of the term, students will be expected to converse in a clearly participatory fashion, initiate, sustain and bring closure to a wide variety of communicative tasks using diverse strategies.
Note: Expected to be given in 2013–14.
Prerequisite: Urdu 103 or Instructor’s permission.

Graduate Courses of Reading and Research

*Urdu 300. Reading and Research
Catalog Number: 2131
Ali S. Asani 7739

Special Concentrations
AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Degrees in Special Concentrations

Julie A. Buckler, Professor of Slavic Languages and Literatures, Harvard College Professor
(Chair)
Mahzarin R. Banaji, Richard Clarke Cabot Professor of Social Ethics
Jason Beckfield, Professor of Sociology
Deborah D. Foster, Senior Lecturer on Folklore and Mythology
Byron J. Good, Professor of Medical Anthropology in the Department of Social Medicine
(Medical School)
Mary-Jo Del Vecchio Good, Professor of Global Health and Social Medicine (Medical School)
David A. Haig, George Putnam Professor of Organismic and Evolutionary Biology, Harvard
College Professor
Jerold Kayden, Frank Backus Williams Professor of Urban Planning and Design (Design School)
Stephen A. Marglin, Walter S. Barker Professor of Economics
Andrew W. Murray, Herchel Smith Professor of Molecular Genetics
Sandra Naddaff, Senior Lecturer on Literature and Comparative Literature
Martin Puchner, Byron and Anita Wien Professor of Drama and of English and Comparative
Literature
D. N. Rodowick, William R. Kenan, Jr. Professor of Visual and Environmental Studies
Richard K. Wolf, Professor of Music (on leave 2012-13)
Richard W. Wrangham, Ruth Moore Professor of Biological Anthropology

Application forms and information on completing petitions for Special Concentrations may be
obtained from the Committee’s office, located in Warren House (near the Barker Center).

Primarily for Undergraduates

*Special Concentrations 91r. Supervised Reading and Research
Catalog Number: 2815
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Open to Special Concentrations concentrators who wish to pursue supervised study for
graded credit in an area not covered by courses currently offered by regular Departments and
Committees. Students must secure the written approval of the faculty member with whom they
wish to study and the signature of the Faculty Adviser and the Director of Undergraduate Studies
of Special Concentrations.

*Special Concentrations 96r. Senior Projects
Catalog Number: 0829
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Designed for seniors in their final term completing their senior project to meet the Basic
(rather than Honors) requirements for concentration. May be repeated with the permission of the
Director of Undergraduate Studies and the Faculty Adviser. Students must secure the written
approval of the faculty member with whom they wish to study and the signature of the Faculty Adviser and the Director of Undergraduate Studies of Special Concentrations.

*Special Concentrations 97r. Tutorial — Sophomore Year
Catalog Number: 2660
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Ordinarily taken by honors sophomores.

*Special Concentrations 98r. Tutorial — Junior Year
Catalog Number: 2497
Deborah D. Foster and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Successful completion two terms of *Special Concentrations 98r are ordinarily required of all honors concentrators in their junior year. Exceptions to this can only be granted with the consent of the Faculty Adviser and the Director of Undergraduate Studies of Special Concentrations.

*Special Concentrations 99. Tutorial — Senior Year
Catalog Number: 3294
Deborah D. Foster and members of the Committee
Full course. Hours to be arranged.
Note: Ordinarily taken by honors seniors as a full course. Either half year may be taken as a half course only with the consent of the Faculty Adviser and the Director of Undergraduate Studies of Special Concentrations. Graded Sat/Unsat.

Statistics

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Statistics

David P. Harrington, Professor of Statistics and Professor of Biostatistics (Public Health) (Acting Chair and Co-Director of Undergraduate Studies)
Alan Agresti, Visiting Professor of Statistics (University of Florida)
Edoardo Maria Airoldi, Assistant Professor of Statistics, Associate Professor of Statistics
Joseph K. Blitzstein, Professor of the Practice in Statistics (Co-Director of Undergraduate Studies)
Stephen James Blyth, Professor of the Practice of Statistics
Luke Bornn, Assistant Professor of Statistics  
Tirthankar Dasgupta, Associate Professor of Statistics  
Andrew Gelman, Visiting Professor of Statistics  
Mark E. Glickman, Visiting Professor of Statistics *(Boston University)*  
S.C. Samuel Kou, Professor of Statistics *(Co-Director of Graduate Studies)*  
Jun S. Liu, Professor of Statistics *(on leave fall term)*  
Xiao-Li Meng, Whipple V.N. Jones Professor of Statistics, Dean of the Graduate School of Arts and Sciences  
Luke Weisman Miratrix, Assistant Professor of Statistics  
Mayumi Morimoto, Preceptor in Statistics  
Carl N. Morris, Professor of Statistics *(on leave spring term)*  
Sergiy O. Nesterko, Lecturer on Statistics  
Lindsay Page, Lecturer on Statistics  
Michael Isaac Parzen, Senior Lecturer on Statistics  
Erol Pekoz, Visiting Professor of Statistics *(Boston University)*  
Natesh S. Pillai, Assistant Professor of Statistics *(Co-Director of Graduate Studies)* *(on leave spring term)*  
Donald B. Rubin, John L. Loeb Professor of Statistics  
Cassandra Pattanayak, College Fellow in Statistics, Lecturer on Economics

**Other Faculty Offering Instruction in the Department of Statistics**

Steven Richard Finch  
Daniel James Greiner, Professor of Law *(Law School)*  
Xiaole Shirley Liu, Associate Professor of Biostatistics *(Public Health)*  
Alan M. Zaslavsky, Professor of Health Care Policy (Statistics) *(Medical School)*

**Affiliates of the Department of Statistics**

Raj Chetty, Affiliate of the Department of Statistics; Professor of Economics

Statistics is a relatively young discipline organized around the rapidly growing body of knowledge about quantitative methods for the analysis of data, the making of rational decisions under uncertainty, the design of experiments, and the modeling of randomness and variability in the social and natural sciences.

A basic introduction to the field is provided by any of Statistics 100 through 104, which introduce statistical principles (without any mathematical or statistical prerequisite), with different areas of application emphasized as indicated in the descriptions. Statistics 100, 101, and 104 are Gen Ed-eligible, within the Empirical and Mathematical Reasoning category.

Empirical and Mathematical Reasoning 16: Real Life Statistics: Your Chance at Happiness (or Misery) is a newly designed Gen Ed course introducing statistical principles and reasoning as they arise in everyday life, organized through modules on various areas of application such as health, wine-tasting, and finance.
An introduction to probability and statistics at a higher mathematical and theoretical level is provided by Statistics 110 together with Statistics 111. These courses provide a foundation for understanding random variables, statistical models, and statistical inference, and are prerequisites for most of the department’s more advanced courses.

Statistics 101 and 104 will be accepted as fulfilling any requirement or prerequisite that is fulfilled by Statistics 100. Consult the Statistics Department or your tutorial office for more information about courses that satisfy your concentration requirements or for guidance on selecting courses. More detailed information can be accessed at the Statistics Department website: www.stat.harvard.edu.

**Primarily for Undergraduates**

*Statistics 91r. Supervised Reading and Research*
Catalog Number: 6641
Joseph K. Blitzstein, David P. Harrington (Public Health), and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Supervised reading and research in an area of statistics agreed upon by the student and a faculty adviser.
Note: Normally may not be taken more than twice; may be counted once for concentration credit in Statistics, if taken for a letter grade; may be taken in either term; for further information, consult Co-Directors of Undergraduate Studies.

*Statistics 98. Tutorial — Junior Year*
Catalog Number: 14706
David P. Harrington (Public Health) and Cassandra Pattanayak
Half course (spring term). W., 4–6.
Introduction to reading, writing, presenting, and research in statistics. Students will learn to formulate and approach a research question, critically review papers that make use of statistics, and clearly communicate statistical ideas and arguments orally and in writing. Limited to junior concentrators in statistics.

*Statistics 99hf. Tutorial — Senior Year*
Catalog Number: 4381
David P. Harrington (Public Health) and Joseph K. Blitzstein
Half course (throughout the year). Hours to be arranged.
The systematic application of statistical ideas to a problem area.

**For Undergraduates and Graduates**

*Statistics 100. Introduction to Quantitative Methods for the Social Sciences and Humanities*
Catalog Number: 3808
Luke Miratrix (fall term) and David P. Harrington (Public Health) (spring term)
Half course (fall term; repeated spring term). Fall: M., W., F., at 10, and weekly sections to be arranged; Spring: M., W., F., at 11, and weekly sections to be arranged. EXAM GROUP: Fall: 3; Spring: 4
Introduction to key ideas underlying statistical and quantitative reasoning. Topics covered: methods for organizing, summarizing and displaying data; elements of sample surveys, experimental design and observational studies; methods of parameter estimation and hypothesis testing in one- and two-sample problems; regression with one or more predictors; correlation; and analysis of variance. Explores applications in a wide range of fields, including the social and political sciences, medical research, and business and economics.

Note: Only one of the following courses may be taken for credit: Statistics 100, 101, 104. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

**Statistics 101. Introduction to Quantitative Methods for Psychology and the Behavioral Sciences**
Catalog Number: 5128
Lindsay Page
Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
Similar to Statistics 100, but emphasizes concepts and practice of statistics used in psychology and other social and behavioral sciences. Topics covered: describing center and variability; probability and sampling distributions; estimation and hypothesis testing for comparing means and comparing proportions; contingency tables; correlation and regression; multiple regression; analysis of variance. Emphasis on translation of research questions into statistically testable hypotheses and models, and interpretation of results in context.

Note: Only one of the following courses may be taken for credit: Statistics 100, 101, 104. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

**Statistics 104. Introduction to Quantitative Methods for Economics**
Catalog Number: 4582
Michael Isaac Parzen
Half course (fall term; repeated spring term). Lecture 1: M., W., F., at 11, or Lecture 2: M., W., F., at 12, and weekly sections to be arranged. EXAM GROUP: 4
Similar to Statistics 100, but emphasizes applications in fields including, but not limited to, economics, health sciences and policy analysis. Topics covered: descriptive and summary statistics for both measured and counted variables; elements of experimental and survey design; probability; and statistical inference including estimation and tests of hypotheses as applied to one- and two-sample problems, multiple regression, correlation, and analysis of variance. Taught at a slightly higher level than Statistics 100 and 101.

Note: Only one of the following courses may be taken for credit: Statistics 100, 101, 104. This course, when taken for a letter grade, meets the General Education requirement for Empirical and Mathematical Reasoning or the Core area requirement for Quantitative Reasoning.

**Statistics 107. Introduction to Business and Financial Statistics**
Catalog Number: 76433
Michael Isaac Parzen
Half course (spring term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13
This course introduces the technical skills required for data-driven analysis of business and financial data. Emphasis is placed on applying statistical methods to summarize and make
inferences from complex data and to develop quantitative models to assist business decision making. The software packages Excel and R will be used to obtain quantitative solutions to financial problems. Topics include: understanding the concept of risk, portfolio construction and analysis, valuing options, testing trading systems, and simulation techniques.

*Prerequisite:* Statistics 100, 101, 104 or equivalent.

**Statistics 110. Introduction to Probability**
Catalog Number: 0147
Joseph K. Blitzstein

*Half course (fall term). M., W., F., at 12, and weekly sections to be arranged. EXAM GROUP: 5*


*Note:* This course, when taken for a letter grade, meets the Core area requirement for Quantitative Reasoning.

*Prerequisite:* Mathematics 18 or above (may be taken concurrently).

**Statistics 111. Introduction to Theoretical Statistics**
Catalog Number: 1836
Edoardo Maria Airoldi

*Half course (spring term). Tu., Th., 1-2:30, and weekly sections to be arranged. EXAM GROUP: 15, 16*

Basic concepts of statistical inference from frequentist and Bayesian perspectives. Topics include maximum likelihood methods, confidence and Bayesian interval estimation, hypothesis testing, least squares methods and categorical data analysis.

*Prerequisite:* Mathematics 19a and 19b or equivalent and Statistics 110.

**Statistics 115. Introduction to Computational Biology and Bioinformatics**
Catalog Number: 9776
Xiaole Shirley Liu (Public Health) and Jun S. Liu

*Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14*

The course will cover basic technology platforms, data analysis problems and algorithms in computational biology. Topics include sequence alignment and search, high throughput experiments for gene expression, transcription factor binding and epigenetic profiling, motif finding, RNA/protein structure prediction, proteomics and genome-wide association studies. Computational algorithms covered include hidden Markov model, Gibbs sampler, clustering and classification methods.

*Prerequisite:* Good quantitative skills, strong interest in biology, willingness and diligence to learn programming.

**Statistics 123. Applied Quantitative Finance on Wall Street**
Catalog Number: 71785
Stephen James Blyth
Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
Introduction to modern financial derivative markets and the probabilistic techniques used to navigate them. Topics include: forwards, swaps and options; risk-neutrality, numeraires and the fundamental theorem of asset pricing; and an introduction to interest-rate derivatives and their valuation. Methodology motivated by real problems from the financial industry.
Note: Designed for those seeking an understanding of the quantitative challenges on Wall Street and the probabilistic tool-kit developed to address them.
Prerequisite: Statistics 110 or equivalent.

Statistics 131, Time Series Analysis and Forecasting
Catalog Number: 8291
Tirthankar Dasgupta
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Prerequisite: Statistics 111 and 139 or equivalent.

Statistics 135, Statistical Computing Software
Catalog Number: 3451 Enrollment: Limited to 25.
Steven Richard Finch
Half course (fall term). M., W., F., at 10. EXAM GROUP: 3
An introduction to major statistics packages used in academics and industry (SAS and R). Will discuss data entry and manipulation, implementing standard analyses and graphics, exploratory data analysis, simulation-based methods, and new programming methods.
Prerequisite: Statistics 110 and 139 (may be taken concurrently) or with permission of instructor.

Statistics 139, Statistical Sleuthing Through Linear Models
Catalog Number: 1450
Cassandra Pattanayak
Half course (fall term). Tu., Th., 11:30-1, and weekly sections to be arranged. EXAM GROUP: 13, 14
A serious introduction to statistical inference with linear models and related methods. Topics include t-tools and permutation-based alternatives, multiple-group comparisons, analysis of variance, linear regression, model checking and refinement, and causation versus correlation. Emphasis on thinking statistically, evaluating assumptions, and developing tools for real-life applications.
Prerequisite: Statistics 100 or equivalent and Mathematics 19a and 19b or equivalent.

Statistics 140, Design of Experiments
Catalog Number: 7112
Tirthankar Dasgupta and Donald B. Rubin
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8
Statistical designs for efficient experimentation in the physical, life, social and management sciences and in engineering. A systematic approach to explore input-output relationships by deliberately manipulating input variables. Topics include analysis of variance, completely randomized and randomized block designs, Latin square designs, balanced incomplete block designs, factorial designs, confounding in blocks, fractional replications, orthogonal arrays, and response surface designs. Each topic motivated by a real-life example. 

**Prerequisite:** Statistics 100 or equivalent and Mathematics 19a and 19b.

**Statistics 149. Statistical Sleuthing through Generalized Linear Models**
Catalog Number: 6617
*Mark E. Glickman (Boston University)*
*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7*
Sequel to Statistics 139, emphasizing common methods for analyzing continuous non-normal and categorical data. Topics include contingency tables, log-linear models, logistic, Probit and Poisson regression, model selection, model checking, and an introduction to non-parametric methods. 

**Note:** Examples will be drawn from several fields, particularly from biology and social sciences. 

**Prerequisite:** Statistics 139 or with permission of instructor.

**[Statistics 160. Design and Analysis of Sample Surveys]**
Catalog Number: 2993
*Alan M. Zaslavsky (Medical School)*
*Half course (fall term). Hours to be arranged.*
Methods for design and analysis of sample surveys. The toolkit of sample design features and their use in optimal design strategies. Sampling weights and variance estimation methods, including resampling methods. Brief overview of nonstatistical aspects of survey methodology such as survey administration and questionnaire design and validation (quantitative and qualitative). Additional topics: calibration estimators, variance estimation for complex surveys and estimators, nonresponse, missing data, hierarchical models, and small-area estimation. 

**Note:** Expected to be omitted in 2012–13. Expected to be given in 2013–14. 

**Prerequisite:** Statistics 111 or 139 or with permission of instructor.

**Statistics 170. Introduction to Quantitative Methods in Finance**
Catalog Number: 1202
*Erol Pekoz (Boston University)*
*Half course (fall term). M., W., 2:30–4. EXAM GROUP: 7, 8*
Stochastic analysis tools as a basis for developing asset pricing theory. Various quantitative methods widely used in the financial industry for valuing derivative products: binomial-tree valuation methods, extensions of the Black-Scholes option pricing formula, and Monte Carlo simulations. 

**Prerequisite:** Statistics 110 and 111 or equivalent.

**Statistics 171. Introduction to Stochastic Processes**
Catalog Number: 4180
*S.C. Samuel Kou*
*Half course (spring term). M., W., 2:30–4, and weekly sections to be arranged. EXAM GROUP:*

1377
An introductory course in stochastic processes. Topics include Markov chains, branching processes, Poisson processes, birth and death processes, Brownian motion, martingales, introduction to stochastic integrals, and their applications.

**Prerequisite:** Statistics 110 or equivalent.

### Cross-listed Courses

**Economics 1127. Statistical Methods for Evaluating Causal Effects**

**Primarily for Graduates**

**Statistics 210. Probability Theory**

Catalog Number: 2487

*Joseph K. Blitzstein and Carl N. Morris*

**Half course (fall term). T., Th., 1-2:30, and weekly sections to be arranged. EXAM GROUP: 15, 16**


**Prerequisite:** Statistics 110 or equivalent required; Statistics 111 or equivalent recommended.

**Statistics 211. Statistical Inference**

Catalog Number: 1946

*Joseph K. Blitzstein and Tirthankar Dasgupta*

**Half course (spring term). Tu., Th., 1–2:30, and weekly sections to be arranged. EXAM GROUP: 15, 16**

Inference: frequency, Bayes, decision analysis, foundations. Likelihood, sufficiency, and information measures. Models: Normal, exponential families, multilevel, and non-parametric. Point, interval and set estimation; hypothesis tests. Computational strategies, large and moderate sample approximations.

**Prerequisite:** Statistics 111 and 210 or equivalent.

**Statistics 212. Advanced Stochastic Processes**

Catalog Number: 7864

*Erol Pekoz (Boston University)*

**Half course (fall term). F., 2:30–4:30. EXAM GROUP: 7, 8, 9**

Measure theory, central limit theorems and Stein’s method, Markov chains, martingales, Brownian motion, approximations, and inequalities.

**Prerequisite:** Statistics 210 or Statistics 211 or with permission of instructor.

**Statistics 215. Introduction to Computational Biology and Bioinformatics**

Catalog Number: 29169

*Xiaole Shirley Liu (Public Health) and Jun S. Liu*

**Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14**

Meets with Statistics 115, but graduate students are required to do more coding, complete a
research project and submit a written report during reading period in addition to completing all work assigned for Statistics 115.

**Prerequisite:** Good quantitative skills, strong interest in biology, good programming skills in C/C++, Java, Perl or Python.

**Statistics 220. Bayesian Data Analysis**  
Catalog Number: 6270  
Andrew Gelman  
*Half course (fall term).* F., 1–2:30, W., 6:30–8 p.m.; .  
Basic Bayesian models, followed by more complicated hierarchical and mixture models with nonstandard solutions. Includes methods for monitoring adequacy of models and examining sensitivity of models.  
**Note:** Emphasis throughout term on drawing inferences via computer simulation rather than mathematical analysis.  
**Prerequisite:** Statistics 110 and 111.

**Statistics 221. Statistical Computing and Visualization**  
Catalog Number: 5959  
Sergiy O. Nesterko  
*Half course (spring term).* M., W., 1–2:30; Tu., at 4; Th., at 2. EXAM GROUP: 6, 7  
Common statistical computational methods: random number generation, optimization methods, numerical integration, Monte Carlo methods including Metropolis-Hastings and Gibbs and Hamiltonian samplers, Expectation-Maximization algorithm, data augmentation strategies, algorithm parallelization, and essential visualization techniques.  
**Note:** Computer programming exercises will apply the methods discussed in class.  
**Prerequisite:** Linear algebra, Statistics 111, and knowledge of a computer programming language (R or Matlab) required; Statistics 220 recommended.

**Statistics 225. Spatial Statistics**  
Catalog Number: 6499  
Luke Bornn  
*Half course (spring term).* M., W., 2:30–4. EXAM GROUP: 7, 8  
Introduction to spatial and spatio-temporal statistics. Classic spatial statistics will be covered in addition to more modern hierarchical techniques and computational methods. The course will blend theory and application, with a focus on the latter.

**Statistics 230. Multivariate Statistical Analysis**  
Catalog Number: 5206  
S.C. Samuel Kou  
*Half course (fall term).* M., W., 1–2:30; . EXAM GROUP: 6, 7  
**Prerequisite:** Statistics 110 and 111.
[Statistics 231. Time Series Analysis and Forecasting]
Catalog Number: 7537
Tirthankar Dasgupta
Half course (fall term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
Meets with Statistics 131, but graduate students will be exposed to a more rigorous treatment of

time series analysis.

Prerequisite: Statistics 111 and 139 or equivalent.

Statistics 232r. Topics in Missing Data
Catalog Number: 9483
Donald B. Rubin
Half course (fall term). W., 10–12:30. EXAM GROUP: 3, 4, 5
The modern era of work on missing data problems began in the 1970s and has seen an explosion
of developments since then. Seminar will focus on an updated version of a classic text,
supplemented with classic articles.

[Statistics 240. Matched Sampling and Study Design]
Catalog Number: 4036
Donald B. Rubin and Tirthankar Dasgupta
Half course (fall term). W., 5–7 pm. EXAM GROUP: 9
This course provides an accessible introduction to the study of matched sampling and other
design techniques in any field (e.g., economics, education, epidemiology, medicine, political
science, etc.) conducting empirical research to evaluate the causal effects of interventions.

Note: Expected to be given in 2013–14.
Prerequisite: Statistics 110, Statistics 111, and Statistics 139.

Statistics 242. Permutation and Resampling Based Statistical Methods - (New Course)
Catalog Number: 27674
Luke Weisman Miratrix
Half course (spring term). Hours to be arranged.
Bootstrap and resampling allow for principled data analysis in diverse areas such as social,
biological, or physical sciences. We will implement methods in R, conduct simulation studies,
tackle applied projects, and do theoretical work.
Prerequisite: Some introductory statistics. Some experience with R or other statistical software
ideal, but not necessary.

*Statistics 244. Linear and Generalized Linear Models
Catalog Number: 51453
Alan Agresti (University of Florida)
Half course (fall term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17
The theory and application of generalized linear models, including models for binary and
multinomial data, models for count data, overdispersion and quasi likelihood methods, and
models and methods for clustered (e.g., repeated measurement) data.
Prerequisite: Strong statistics background required (at the second-year graduate level), Statistics
210 may be taken concurrently, Statistics 211 desirable.
**Statistics 245. Statistics and Litigation**  
Catalog Number: 3488  
*Daniel James Greiner (Law School)*  
Half course (spring term). M., Th., 5:30–7:30 p.m. EXAM GROUP: 9, 18  
Interaction between quantitative methods and law. Teaming with law students: analyze data, prepare expert reports, and give testimony. Learn how to communicate with and present results to untrained but intelligent users, and to defend conclusions.  
**Prerequisite:** Basic knowledge of R programming and a graduate course in data analysis, such as Statistics 220, Economics 2120, or a 2000-level quantitative Government course. No knowledge of legal issues is presumed.

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**[Statistics 260. Design and Analysis of Sample Surveys]**  
Catalog Number: 59588  
*Alan M. Zaslavsky (Medical School)*  
Half course (fall term). Hours to be arranged.  
Meets with Statistics 160, but graduate students will have an extended class period and complete additional assignments for a more theoretical, in-depth treatment of topics.  
**Note:** Expected to be omitted in 2012–13. Expected to be given in 2013–14.  
**Prerequisite:** Statistics 110, 111, and 139 or with permission of instructor.

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**Statistics 265r. (formerly Statistics 265). Reading Cox**  
Catalog Number: 29813  
*Joseph K. Blitzstein and Xiao-Li Meng*  
Half course (fall term). Tu., 6–8 p.m. EXAM GROUP: 18  
Exploration of the statistical contributions of David R. Cox through study of his writings. Both deeply influential and deeply controversial ideas will be discussed; topics include statistical foundations and principles, survival analysis, and stochastic processes.  
**Prerequisite:** Statistics 211.

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**Statistics 285r. Statistical Machine Learning**  
Catalog Number: 0512 Enrollment: Limited to 20.  
*Edoardo Maria Airoldi*  
Half course (spring term). Tu., 2:30–4. EXAM GROUP: 16, 17  
**Note:** Computer programming exercises will apply the methods discussed in class.  
**Prerequisite:** Familiarity with estimation and inference techniques, and knowledge of a computer programming language (R or Matlab) required; Statistics 220 or 221 recommended.

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**Cross-listed Courses**

Biostatistics 244. Analysis of Failure Time Data  
*Biostatistics 250. Probability Theory and Applications II*
Graduate Courses of Reading and Research

*Statistics 301. Special Reading and Research
Catalog Number: 4474
Edoardo Maria Airoldi 6132, Joseph K. Blitzstein 5588, Stephen James Blyth 6712, Tirthankar Dasgupta 5765, David P. Harrington (Public Health) 4318, S.C. Samuel Kou 4054, Jun S. Liu 3760 (on leave fall term), Xiao-Li Meng 4023, Carl N. Morris 2178 (on leave spring term), Michael Isaac Parzen 6728, Natesh S. Pillai 6729 (on leave spring term), Donald B. Rubin 7966, and Alan M. Zaslavsky (Medical School) 1927

*Statistics 302. Direction of Doctoral Dissertations
Catalog Number: 3382
Edoardo Maria Airoldi 6132, Joseph K. Blitzstein 5588, Stephen James Blyth 6712, Tirthankar Dasgupta 5765, David P. Harrington (Public Health) 4318, S.C. Samuel Kou 4054, Jun S. Liu 3760 (on leave fall term), Xiao-Li Meng 4023, Carl N. Morris 2178 (on leave spring term), Michael Isaac Parzen 6728, Natesh S. Pillai 6729 (on leave spring term), Donald B. Rubin 7966, and Alan M. Zaslavsky (Medical School) 1927

*Statistics 303hf. The Art and Practice of Teaching Statistics
Catalog Number: 3545
Xiao-Li Meng 4023 and Luke Bornn
Half course (throughout the year). Tu., 10–12.
Required of all first-year doctoral students in Statistics.

*Statistics 310hfr. Topics in Astrostatistics
Catalog Number: 2105
Xiao-Li Meng 4023
Half course (throughout the year). Tu., 12–2.

Catalog Number: 0826
Jun S. Liu 3760 (on leave fall term)
Half course (spring term). Hours to be arranged.
Prerequisite: Statistics 220 or equivalent.

*Statistics 312r (formerly *Statistics 312). Estimation Problems for Stochastic Processes and High Dimensional Data
Catalog Number: 86589
Natesh S. Pillai 6729 (on leave spring term)
Focusing on inference problems for stochastic processes and statistical modeling in high dimensions. Contemporary papers from different fields will be discussed and presented by students. Participants will be encouraged to develop their own research problems in this active area.
**Statistics 321. Stochastic Modeling and Bayesian Inference**
Catalog Number: 4060
S.C. Samuel Kou 4054
Stochastic processes and their applications in biological, chemical and financial modeling. Bayesian inference about stochastic models based on the Monte Carlo sampling approach.

**Statistics 324r. Parametric Statistical Inference and Modeling**
Catalog Number: 3366
Carl N. Morris 2178 (on leave spring term)
Theory of multi-level parametric models, including hidden Markov models, and applications likely to include biostatistics, health services, education, and sports.
Note: Expected to be given in 2013–14.

**Statistics 325. Advanced Topics in Environmental Modeling - (New Course)**
Catalog Number: 83356
Luke Bornn 7078
Focus will be on research topics in spatial statistics, Monte Carlo, and the overlap and interplay between the two fields.

**Statistics 340. Random Network Models**
Catalog Number: 1650
Joseph K. Blitzstein 5588 and Edoardo Maria Airoldi 6132
Half course (spring term). Hours to be arranged.
Random graph models for biological, social, and information networks, including fixed degree, exponential, power law, small world, and geometric random graphs. Estimation and sampling methods for network data.
Note: Expected to be given in 2013–14.

**Statistics 341. Advanced Topics in Experimental Design**
Catalog Number: 9827
Tirthankar Dasgupta 5765
Half course (spring term). W., 10–12.

**Statistics 342. Causal Graphs in Low and High Dimensions - (New Course)**
Catalog Number: 42781
Luke Weisman Miratrix 6490
Half course (fall term). Hours to be arranged.
Papers in this area will be read with a skeptical but judicious eye. When could these methods offer something tangible, when might they fail, and how can we know in which circumstance we lie?

**Statistics 366. Research Cultivation and Culmination - (New Course)**
Catalog Number: 65544
Joseph K. Blitzstein 5588 and Xiao-Li Meng 4023
Half course (spring term). Tu., 6–8 p.m.
Introduction to the process of developing research ideas into publications in Statistics, using case studies and actual research projects. Emphasizes scientific communication in research papers and presentations, deciphering referee reports, and finding the right forum.
Prerequisite: Statistics 211

*Statistics 392hf. Research Topics in Missing Data, Matching and Causality
Catalog Number: 44383
Donald B. Rubin 7966
Half course (throughout the year). W., 4–6.
Students will make at least one presentation on current research in applied or theoretical statistics. All registered students are expected to participate by offering commentary/suggestions during presentations. This is a requirement to obtain credit.

*Statistics 399. Problem Solving in Statistics
Catalog Number: 1035
Members of the Department
Half course (fall term). Hours to be arranged.
Aimed at helping Statistics PhD students transition through the qualifying exams and into research.

Cross-listed Courses


Stem Cell and Regenerative Biology

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Stem Cell and Regenerative Biology (FAS, HMS)

Douglas A. Melton, Xander University Professor of Stem Cell and Regenerative Biology, Harvard College Professor (Co-Chair and Co-Head Tutor)
William J. Anderson, Senior Lecturer on Stem Cell and Regenerative Biology
David T. Scadden, Professor of Stem Cell and Regenerative Biology and Gerald and Darlene Jordan Professor of Medicine (Co-Chair)
Paola Arlotta, Morris Kahn Associate Professor of Stem Cell and Regenerative Biology
Fernando D. Camargo, Assistant Professor of Stem Cell and Regenerative Biology
Kenneth R. Chien, Visiting Professor of Stem Cell and Regenerative Biology
Chad A. Cowan, Assistant Professor of Stem Cell and Regenerative Biology
Kevin C. Eggan, Professor of Stem Cell and Regenerative Biology *(Co-Head Tutor)*
Konrad Hochedlinger, Professor of Stem Cell and Regenerative Biology *(Medical School)*
Steven E. Hyman, Professor of Stem Cell and Regenerative Biology and Harvard University
Distinguished Service Professor
Jeffrey D. Macklis, Professor of Stem Cell and Regenerative Biology and Professor of Surgery and Neurology, Harvard Medical School
Mary E.L. Madabhushi, Preceptor in Stem Cell and Regenerative Biology
Andrew P. McMahon, Visiting Professor of Stem Cell and Regenerative Biology
Alexander Meissner, Associate Professor of Stem Cell & Regenerative Biology
Kiran Musunuru, Assistant Professor of Stem Cell and Regenerative Biology
John L. Rinn, Associate Professor of Stem Cell & Regenerative Biology
Derrick J. Rossi, Assistant Professor of Stem Cell and Regenerative Biology
Lee L. Rubin, Professor of Stem Cell and Regenerative Biology
Jack L. Strominger, Higgins Professor of Biochemistry in the Department of Stem Cell and Regenerative Biology
Gregory L. Verdine, Erving Professor of Chemistry in the Departments of Stem Cell and Regenerative Biology and of Chemistry and Chemical Biology
Amy J. Wagers, Forst Family Professor of Stem Cell and Regenerative Biology
Qiao Zhou, Assistant Professor of Stem Cell and Regenerative Biology
Leonard I. Zon, Professor of Stem Cell and Regenerative Biology and Grousbeck Professor of Pediatrics, Harvard Medical School *(Medical School)*

*Other Faculty Offering Instruction in Stem Cell and Regenerative Biology*

George Q. Daley, Professor of Biological Chemistry and Molecular Pharmacology *(Medical School)*
Vicki L. Sato, Professor of the Practice of Molecular and Cellular Biology

*Primarily for Undergraduates*

**SCRB 10. Human Developmental and Regenerative Biology**
Catalog Number: 96716
*Kevin C. Eggan and William J. Anderson*
Half course (fall term). M., W., F., at 1, and a weekly section to be arranged. EXAM GROUP: 6
Fundamental concepts in developmental biology will be presented within the framework of the developing and regenerating mammal. Where possible, lectures will focus on humans.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Science of Living Systems or the Core area requirement for Science B.
*Prerequisite:* Concurrent enrollment in Life and Physical Sciences A or Life Sciences 1a.

*SCRB 90. Classic Experiments in Developmental Biology*
Catalog Number: 15214 Enrollment: Limited to 20.
*Douglas A. Melton*
Half course (spring term). M., 10–12. EXAM GROUP: 3, 4
This course will introduce students to classic experiments in developmental biology. We will explore the historical background, experimental design, and results of a handful of experiments that have defined the field of developmental biology and changed our understanding of the discipline. Students will read primary literature and, in turn, present the conclusions in written and oral formats.

**Prerequisite:** SCRB 10 or permission of the instructor.

*SCRB 91r. Introduction to Research*

Catalog Number: 75408

*William J. Anderson and members of the Department*

*Half course (fall term; repeated spring term). Hours to be arranged.*

Laboratory research in topics related to the Human Developmental and Regenerative Biology Concentration under the direction of, or approved by, members of the Department of Stem Cell and Regenerative Biology, Principal Faculty of the Harvard Stem Cell Institute, or others with permission. A paper must be submitted to the laboratory sponsor and to the HDRB Concentration Office for review by the Course Director and Head Tutors.

**Note:** Limited to Human Developmental and Regenerative Biology Concentrators; written permission of the laboratory sponsor must be submitted to the HDRB Concentration Office prior to enrolling in the course. This introductory research course is intended to prepare students for SCRB 99 and may ordinarily be repeated no more than once. Ordinarily may not be taken as a fifth course. Laboratory safety session required.

*SCRB 99. Laboratory Research for Honors Thesis*

Catalog Number: 23886

*William J. Anderson and members of the Department*

*Full course. Hours to be arranged.*

For honors candidates writing a thesis in Human Developmental and Regenerative Biology.

**Note:** Ordinarily may not be taken as a fifth course. Laboratory safety session required.

**Prerequisite:** Students intending to enroll in the fall are required to submit a written proposal to the Course Director. Students may enter the course at midyear only with the permission of the Course Director. The thesis proposal must be approved by the Course Director and Head Tutors prior to enrolling in SCRB 99.

**Cross-listed Courses**

**Engineering Sciences 53. Quantitative Physiology as a Basis for Bioengineering**

[Life Sciences 60. Ethics, Biotechnology, and the Future of Human Nature]

**For Undergraduate and Graduates**

**SCRB 125 (formerly MCB 125). Nuclear Reprogramming and Developmental Plasticity**

Catalog Number: 5481

*Konrad Hochedlinger (Medical School)*

*Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7*

This course will focus on the biology of organismal cloning, cellular reprogramming, and developmental plasticity. The role that stem cells play in these processes and the genetic and
molecular circuitry that underlie developmental potency and reprogramming will be discussed. 

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54, or permission of the instructor.

**SCRB 130. Biomedical Entrepreneuring: Turning Ideas into Medicine**

Catalog Number: 44334 Enrollment: Limited to 20.

Derrick J. Rossi  
Half course (spring term). F., 9–12. EXAM GROUP: 2, 3, 4

Medicines and other therapeutics have revolutionized the treatment of many diseases. Few of us pause to consider how these products are developed from an initial discovery in the lab to the treatment of patients. This course will consider this journey by incorporating scientific, biotechnology, intellectual property, venture capital, and business perspectives. In addition to lectures, students will work on group projects to chart a strategy toward bringing a novel biomedical idea to the clinic.  

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 52, or permission of the instructor.

**SCRB 140. Developmental and Molecular Basis of Growth and Regeneration**

Catalog Number: 73523

Fernando D. Camargo  
Half course (spring term). M., W., 2:30–4. EXAM GROUP: 7, 8

This course will focus on the biology of organ growth and regeneration from a developmental perspective. How is the size and symmetry of our organs set? How does a regenerating animal sense that something is missing and eventually stop the regenerative process when tissues reform? We will learn about conserved developmental pathways that are necessary for adult regeneration and discuss how the aberrant activation of these pathways can lead to overgrowth disorders such as cancer.  

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54, or permission of the instructor.

**SCRB 150 (formerly MCB 150). Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease**

Catalog Number: 5703  
Kiran Musunuru  
Half course (fall term). W., 2–5. EXAM GROUP: 7, 8, 9

The sequencing of the human genome has revealed the full extent of genetic variation that exists within us as a species. This genetic diversity underlies much of our physical variation as well as our differences in responsiveness to disease stimuli and their treatments. We will explore these and other ramifications of human genetic diversity by applying classical and contemporary genetic tools to the identification of specific genes and pathways that functionally underlie our variable biology.  

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b (or equivalent); SCRB 10 or MCB 52.

[SCRB 155. Epigenetic Regulation in Development]

Catalog Number: 63211
Alexander Meissner

**Half course** (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
Cloning of Dolly the sheep suggests that all of our cells have exactly the same genes as a fertilized egg. If this is true, then how is it that each of our cells reads out those genes differently? This course will explain the developmental events that regulate the expression of genes, as well as how this developmental expression is established and maintained.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; MCB 52; SCRB 10 or permission of the instructor.

**SCRB 156. (Epi)Genomics and Genome Regulation - (New Course)**
Catalog Number: 48086 Enrollment: Limited to 50.

**John L. Rinn and Alexander Meissner**

**Half course** (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
How does every cell use the same genome template to create a myriad of cellular functions? This course will introduce the basic principles behind genome regulation, ranging from classic studies to next generation approaches and technologies. A particular emphasis will be placed on the roles of epigenetic mechanisms and ncRNA in establishing cell fate. Collectively, students will gain a proficiency in understanding the key principles and questions faced in the post genomic era.

*Note:* This course is a condensed combination of SCRB 155 and SCRB 157.

*Prerequisite:* Life Sciences 1a or equivalent; Life Sciences 1b; SCRB 10; MCB 52 or permission of the instructor.

[SCRB 157. The RNA World]
Catalog Number: 57449

**John L. Rinn**

**Half course** (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16
This course will introduce classic experiments and examples of functional RNA genes that comprise the ever-emerging RNA world. We will explore diverse classes of RNA genes and their biochemical mechanisms that have defined field, including overviews of relevant technologies leading to these principal findings. Lecture topics will be followed by students reading and presenting related primary literature. Collectively this course will provide an opportunity to explore the wide spectrum of cellular processes involving RNA molecules.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* Life Sciences 1a or equivalent; Life Sciences 1b; SCRB 10; MCB 52 or permission of the instructor.

**SCRB 160. Experimental Embryology: From Stem Cells to Tissues and Back Again**
Catalog Number: 45194 Enrollment: Limited to 16.

**Paola Arlotta**

**Half course** (fall term). M., 2–6. EXAM GROUP: 7, 8, 9
This advanced laboratory course will apply experimental approaches and surgical techniques to illustrate critical developmental events during mouse embryogenesis. Particular emphasis will be placed on experiments covering the following topics: fertilization and pre-implantation embryology; reprogramming of adult somatic cells into embryonic stem cells; early organ
development; and surgical manipulation of late stage mouse embryos in utero. 
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 118 or MCB 54.

*SCRB 162. Experimental Regenerative Biology
Catalog Number: 37108
Qiao Zhou
Half course (spring term). M., 2–6. EXAM GROUP: 7, 8, 9
This laboratory course will allow advanced undergraduate students to explore classical and modern experimental models of regeneration, and through experimentation, understand the important concepts and key challenges of the regenerative biology field. We will focus in particular on the regeneration of complex tissues and entire organ systems using both invertebrate and vertebrate models, including the planarian worm, the salamander, and the mouse. 
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54, or permission of the instructor.

*SCRB 165. Directed Differentiation of Stem Cells
Catalog Number: 9605 Enrollment: Limited to 24.
Chad A. Cowan
Half course (spring term). Tu., 2:30–4. EXAM GROUP: 16, 17
This practical laboratory course will investigate the fundamental biology of human embryonic stem cells and their remarkable capacity to differentiate into all cells of the body. The underlying developmental pathways that guide embryonic stem cell development into these differentiated cell types will be explored. A chemical biology approach will also be used to probe properties of normal and disease model cells derived from embryonic stem cells. 
Prerequisite: Life and Physical Sciences A or Life Sciences 1a, or permission of instructor.

*SCRB 167. Stem Cells and Regeneration in the Pathobiology and Treatment of Human Disease
Catalog Number: 9556 Enrollment: For advanced students only, seniors and qualified juniors. 
George Q. Daley (Medical School) and members of the Department
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
Stem cells are the basis for tissue maintenance and repair, thus, are essential elements of normal organ and tissue physiology. Stem cells are also targets for disease processes and through transplantation are important therapeutic agents. This course will allow advanced undergraduates to explore how stem cells and tissue regeneration impact human disease pathogenesis and how stem cells might be exploited to advance new therapies for disease. 
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10; MCB 52 or MCB 54.

[SCRB 170. Heart Stem Cell Therapeutics: A Case Study for Regenerative Medicine]
Catalog Number: 22001
Kenneth R. Chien
Half course (fall term). Tu., Th., 1–2:30.
Heart stem cell therapeutics is a paradigm for regenerative medicine. Multipotent "master" heart
progenitors are revolutionizing our understanding of human cardiogenesis and its relationship to disease. Issues such as delivery, grafting, survival, rejection, scalability, tissue engineering, unwanted side effects, and imaging have all arisen when considering cell transplantation therapies. This course will examine the prospects and problems of heart stem cell therapeutics from multiple perspectives, e.g., scientific, medical, philanthropic, drug discovery/safety, governmental, ethical, and financial.

Note: Expected to be given in 2013–14.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54, or permission of the instructor.

**[SCRB 175. Glucose: From Molecule to Society]**
Catalog Number: 59441
*Richard T. Lee (Medical School) and Douglas A. Melton*
Half course (fall term). M., W., at 11, and a lab component to be arranged.
We will explore the biochemistry, cell biology, and physiology that make glucose our main source of energy. How did humans depend on and crave this molecule? What consequences does it hold for normal metabolism and disease? Students will integrate evolution, endocrinology, biostatistics, bioengineering, and regenerative biology approaches in considering sugar and all its consequences. Finally, we will evaluate legal and business issues necessary to move scientific and technical innovations from the laboratory to the patient.

Note: Expected to be given in 2013–14.
Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54; MCB 52 or permission of the instructor.

**[SCRB 178 (formerly MCB 268). Molecular Immunology: Seminar]**
Catalog Number: 2196 Enrollment: Limited to 16.
*Jack L. Strominger*
Half course (spring term). M., Th., 4–6. EXAM GROUP: 9, 18
One session each week is a lecture on current topics in immunology. At the second session, three papers are read from the current literature on that topic (including topics in hematopoietic stem cells, immune cell differentiation, autoimmunity, HIV, cancer, and transplantation), each presented by a student in 30-45 minutes. Course work: reading of papers, seminar presentations, and class participation.

Prerequisite: MCB 169 or permission of instructor required for undergraduates only.

**SCRB 180. Development and Regeneration of the Mammalian Brain**
Catalog Number: 60301
*Jeffrey D. Macklis*
Half course (fall term). Tu., Th., 2:30-4, and a weekly section to be arranged. EXAM GROUP: 16, 17
This course will discuss cellular and molecular mechanisms of regeneration and repair in the mammalian central nervous system (CNS). We will: compare and contrast aspects of neural development with adult neural plasticity; discuss limitations to neuronal regeneration in the mature mammalian CNS following degeneration or injury; examine CNS regeneration approaches directed at overcoming intrinsic limitations; and explore developmental controls and gene manipulation to promote neurogenesis, axonal regeneration, and directed differentiation in
the diseased adult brain.

Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; MCB 80 or permission of the instructor.

*SCRB 187. Brains, Identity, and Moral Agency - (New Course)
Catalog Number: 73713 Enrollment: Limited to 50.
Steven E. Hyman
Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7
Human beings experience a sense of self that provides a stable foundation from which to understand personal experience, consciously formulate goals, and initiate actions. The view that people act in accordance with freely formed intensions underlies important concepts of moral agency and culpability, yet evidence from neuroscience questions this assumption. This course will examine competing views of human agency grounded in concrete scientific examples to encourage reflection on the implications for identity and moral agency.

Note: For students who have taken MCB 80, it is contemplated that there will be a section that incorporates more advanced concepts from neurobiology.

Prerequisite: LPS A or LS 1a (or equivalent - permission of instructor required).

SCRB 190. Understanding Aging: Degeneration, Regeneration, and the Scientific Search for the Fountain of Youth
Catalog Number: 1207
Amy J. Wagers and Lee L. Rubin
Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
This lecture and discussion course will explore the fundamental molecular and cellular mechanisms that govern organismal aging and contemporary strategies to delay or reverse this process.

Prerequisite: Life and Physical Sciences A or Life Sciences 1a; Life Sciences 1b; SCRB 10 or MCB 54.

SCRB 192. Principles of Drug Discovery and Development - (New Course)
Catalog Number: 46717 Enrollment: Limited to 40.
Gregory L. Verdine and Vicki L. Sato
Half course (spring term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14
This interdisciplinary course will examine the process of drug discovery and development through disease-driven examples. Topics include: the efficacy/toxicity balance, the differences between drugs and inhibitors, the translation of cellular biochemistry to useful medicine.

Note: May not be taken concurrently with Chemistry 192. May not be taken for credit if Chemistry 192 or MCB 192 have already been taken.
Prerequisite: Chemistry 20/30 or 17/27, Life Sciences 52 or their equivalents, MCB 52, and one year of organic chemistry. MCB 54 is recommended.

Cross-listed Courses

Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis
*Biomedical Engineering 121 (formerly *Engineering Sciences 122). Cellular Engineering
**Biomedical Engineering 125 (formerly Engineering Sciences 130). Tissue Engineering**

*Life Sciences 1093. Ethics, Biotechnology, and the Future of Human Nature*

*MCB 192. Principles of Drug Discovery and Development*

*[SCRB 185 (formerly *Chemistry 185). Human Disease]*

**Primarily for Graduates**

**[SCRB 200. Current Research in Stem Cell and Regenerative Biology]**

Catalog Number: 88356 Enrollment: Enrollment may be limited.

*Lee L. Rubin*

*Half course (spring term). Tu., 6–8 p.m. EXAM GROUP: 18*

This survey course provides contemporary approaches to the study of stem cell and regenerative biology.

*Note: May not be taken concurrently with SCRB 300qc.*

**Cross-listed Courses**

*[Engineering Sciences 211. Cardiac Biophysics]*

*[Engineering Sciences 222. Advanced Cellular Engineering]*

*[Engineering Sciences 230. Advanced Tissue Engineering]*

*[MCB 234. Cellular Metabolism and Human Disease]*

**Graduate Courses of Reading and Research**

*[SCRB 300qc. Current Research in Stem Cell and Regenerative Biology]*

Catalog Number: 95856

*Lee L. Rubin and members of the Department*

*Quarter course (spring term). Tu., 6–8 p.m.*

This survey course provides contemporary approaches to the study of stem cell and regenerative biology.

*[SCRB 302 (formerly *MCB 302). Mechanisms of Epigenetic Reprogramming]*

Catalog Number: 6640

*Kevin C. Eggan 5373*

*[SCRB 364 (formerly MCB 364). Vertebrate Development]*

Catalog Number: 37752

*Andrew P. McMahon 3312*

*Half course (spring term).*

*[SCRB 382 (formerly *MCB 382). Molecular Immunology]*

Catalog Number: 5515

*Jack L. Strominger 1193*
**SCRB 399 (formerly *MCB 399). Vertebrate Developmental Biology**  
Catalog Number: 45477  
*Douglas A. Melton 7232*

**Cross-listed Courses**

*BCMP 366. Stem Cells in Disease and Development*  
*BCMP 384. Embryonic stem cells, Nuclear Transfer, Cancer, Reprogramming*  
*Cell Biology 351. Cardiovascular Stem Cells in Development and Disease*  
*Chemistry 331. Approaches Toward Understanding and Treating Human Disease*  
*DRB 312. Epigenetic Modifications and Cellular Identity*  
*DRB 314. Molecular and Developmental Neurobiology*  
*DRB 319. Adult mammalian regeneration*  
*Genetics 336. Developmental Biology of Hematopoiesis*  
*Genetics 387. Stem Cells and Developmental Biology*  
*Immunology 360. Hematopoietic Stem Cells and their Niche*  
*Neurobiology 367. Neocortical Development and Regeneration*  

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**Systems Biology**

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

**Faculty of the Committee on Higher Degrees in Systems Biology**

- Timothy J. Mitchison, Hasib Sabbagh Professor of Systems Biology (*Medical School*) (*Co-Chair*)
- Andrew W. Murray, Herchel Smith Professor of Molecular Genetics (*Co-Chair*)
- Marc W. Kirschner, John Franklin Enders University Professor of Systems Biology (*Medical School*)
- Erin K. O’Shea, Paul C. Mangelsdorff Professor of Molecular and Cellular Biology and of Chemistry and Chemical Biology
- Pamela A. Silver, Elliott T. and Onie H. Adams Professor of Biochemistry and Systems Biology (*Medical School*)

**Other Faculty Offering Instruction in Systems Biology**

- Edoardo Maria Airoldi, Assistant Professor of Statistics, Associate Professor of Statistics
- Debra T. Auguste, Assistant Professor of Biomedical Engineering on the Gordon McKay Endowment
Michael P. Brenner, Glover Professor of Applied Mathematics and Applied Physics, Harvard College Professor, Area Dean for Applied Mathematics
Martha L. Bulyk, Associate Professor of Pathology *(Medical School)*
Lewis C. Cantley, Professor of Systems Biology *(Medical School)*
George M. Church, Professor of Genetics *(Medical School)*
Philippe Cluzel, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Vladimir Denic, Associate Professor of Molecular and Cellular Biology
Angela Depace, Assistant Professor of Systems Biology *(Medical School)*
Michael Manish Desai, Assistant Professor of Organismic and Evolutionary Biology and of Physics
Catherine Dulac, Higgins Professor of Molecular and Cellular Biology
Walter Fontana, Professor of Systems Biology *(Medical School)*
Melissa Franklin, Mallinckrodt Professor of Physics
Jeremy M. Gunawardena, Associate Professor of Systems Biology *(Medical School)*
John M. Higgins, Assistant Professor of Systems Biology *(Medical School)*
Curtis Huttenhower, Assistant Professor of Computational Biology and Bioinformatics *(Public Health)*
Roy Kishony, Associate Professor of Systems Biology *(Medical School)*
Galīt Lahav, Assistant Professor of Systems Biology *(Medical School)*
Erel Levine, Assistant Professor of Physics
Richard M. Losick, Maria Moors Cabot Professor of Biology *(on leave 2012-13)*
L. Mahadevan, Lola England de Valpine Professor of Applied Mathematics, of Organismic and Evolutionary Biology, and of Physics
Christopher Marx, Associate Professor of Organismic and Evolutionary Biology
Sean G. Megason, Assistant Professor of Systems Biology *(Medical School)*
Vamsi K. Mootha, Associate Professor of Systems Biology *(Medical School)*
Radhika Nagpal, Fred Kavli Professor of Computer Science *(on leave 2012-13)*
Daniel Joseph Needleman, Assistant Professor of Applied Physics, Associate Professor of Applied Physics and of Molecular and Cellular Biology
Martin A. Nowak, Professor of Mathematics and of Biology
Kevin K. Parker, Tarr Family Professor of Bioengineering and Applied Physics *(on leave fall term)*
Johan M. Paulsson, Associate Professor of Systems Biology *(Medical School)*
Sharad Ramanathan, Assistant Professor of Molecular and Cellular Biology and of Applied Physics, Professor of Molecular and Cellular Biology and Gordon McKay Professor of Applied Physics
Avīv Regev *(Broad Institute, MIT)*
John L. Rinn, Associate Professor of Stem Cell & Regenerative Biology
Pardis Sabeti, Associate Professor of Organismic and Evolutionary Biology
Alan Saghatelian, Associate Professor of Chemistry and Chemical Biology
Alexander F. Schier, Leo Erikson Life Sciences Professor of Molecular and Cellular Biology
Jagesh V. Shah, Assistant Professor of Systems Biology *(Medical School)*
William Shih, Associate Professor of Biological Chemistry and Molecular Pharmacology *(Medical School)*
Peter K. Sorger, Professor of Systems Biology *(Medical School)*
Michael Springer, Assistant Professor of Systems Biology (Medical School)
Jack Szostak, Professor of Chemistry and Chemical Biology; Professor of Genetics (Medical School)
Ralph Weissleder, Professor of Systems Biology (Medical School)
David A. Weitz, Mallinckrodt Professor of Physics and of Applied Physics
Xiaoliang Sunney Xie, Mallinckrodt Professor of Chemistry and Chemical Biology
Peng Yin, Assistant Professor of Systems Biology (Medical School)
Xiaowei Zhuang, Professor of Chemistry and Chemical Biology and of Physics

Systems Biology students should consult course listings from the departments of Biological Sciences, Biophysics, Chemistry, the School of Engineering and Applied Sciences (Applied Mathematics, Applied Physics, Computer Sciences, Engineering Sciences), and the School of Medical Sciences.

Cross-Listed Courses for Undergraduates and Graduates

- Applied Mathematics 115. Mathematical Modeling
- Applied Mathematics 147. Nonlinear Dynamical Systems
- Biomedical Engineering 110 (formerly Engineering Sciences 145). Physiological Systems Analysis
- Biophysics 170. Quantitative Genomics
- Chemistry 60. Foundations of Physical Chemistry
- Chemistry 161. Statistical Thermodynamics
- Chemistry 163. Frontiers in Biophysics
- Computer Science 181. Intelligent Machines: Perception, Learning, and Uncertainty
- Engineering Sciences 156. Signals and Systems
- Mathematics 153. Mathematical Biology-Evolutionary Dynamics
- MCB 111. Mathematics in Biology
- MCB 173. Optical Imaging in the Biological Sciences
- MCB 195. Foundations of Systems Biology and Biological Engineering
- OEB 181. Systematics
- OEB 192. Microbial Evolution
- Physics 181. Statistical Mechanics and Thermodynamics

Primarily for Graduates

- Systems Biology 200. Dynamic and Stochastic Processes in Cells
  Catalog Number: 8701
  Johan M. Paulsson (Medical School) and Jeremy M. Gunawardena (Medical School)
  Half course (fall term). Tu., Th., 10-11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13
  Rigorous introduction to (i) dynamical systems theory as a tool to understand molecular and cellular biology (ii) stochastic processes in single cells, using tools from statistical physics and information theory.
  Note: Students planning to take both quarter courses (SB303 and 304) must enroll in this as a half course on their study card as SysBio200 for now and in the future. Students who take one
half of this quarter can NOT ever take the other half for credit. 
Prerequisite: College-level calculus.

[Systems Biology 201. Principles of Animal Development from a Systems Perspective]
Catalog Number: 5148
Sean G. Megason (Medical School), Angela Depace (Medical School), and Marc W. Kirschner (Medical School)
Half course (spring term). Tu., Th., 2–3:30. EXAM GROUP: 16, 17
Intensive and critical analysis of systems approaches to circuits and principles controlling pattern formation and morphogenesis in animals. Students develop their own ideas and present them through mentored "chalk talks" and other interactive activities. 
Note: Expected to be given in 2013–14.

Systems Biology 204. Biomolecular Engineering and Synthetic Biology
Catalog Number: 71179
Peng Yin (Medical School), George M. Church (Medical School), William Shih (Medical School), and Pamela A. Silver (Medical School)
Half course (fall term). M., W., 2–3:30. EXAM GROUP: 7, 8
A course focusing on the rational design, construction, and applications of nucleic acid- and protein-based synthetic molecular and cellular machinery and systems. Students are mentored to produce substantial term projects.
Note: See http://sb204.net for details

[Systems Biology 205. Synthetic Biology]
Catalog Number: 30087
Pamela A. Silver (Medical School) and Jack Szostak (Medical School)
Half course (spring term). Tu., Th., 4–5:30. EXAM GROUP: 18
A course covering the design and synthesis of new genetic circuits, construction of novel genomes and the chemical basis for building self-replicating systems. 
Note: Expected to be given in 2013–14. Weekly lectures with discussion sections and outside speakers.

Systems Biology 212. Communication of Science - (New Course)
Catalog Number: 47732 Enrollment: Limited to first year Systems Biology students.
Angela Depace (Medical School), Galit Lahav (Medical School), and Vamsi K. Mootha (Medical School)
Half course (fall term). F., 2–5. EXAM GROUP: 7, 8, 9
Students will work collaboratively with faculty and one another on critical science communication skills including crafting graphics, writing fellowships, and giving oral presentations.
Note: This is a required course for first year Systems Biology students.

Cross-Listed Courses Primarily for Graduates

BCMP 200. Molecular Biology
BCMP 201. Biological Macromolecules: Structure, Function and Pathways
[Biophysics 204. Structural Biology From Molecules to Cells]

Biophysics 205. Computational and Functional Genomics
Biophysics 242r. Special Topics in Biophysics
Cell Biology 201. Molecular Biology of the Cell

[Chemical Biology 207. Molecular Approaches to Drug Action, Discovery, and Design]

*Engineering Sciences 222. Advanced Cellular Engineering
Genetics 201. Principles of Genetics
Mathematics 243 (formerly Mathematics 234). Evolutionary Dynamics
MCB 212. Topics in Biophysics

Graduate Courses of Reading and Research

*Systems Biology 300hf. Introduction to Systems Biology Research
Catalog Number: 4103
Timothy J. Mitchison (Medical School) 3713
Half course (throughout the year). M., 6-7:30 pm.
Series of lectures to introduce the research areas of current program faculty in systems biology.
Note: More information is available on the course website: http://isites.harvard.edu/k89367.

*Systems Biology 350. Systems Biology Research
Catalog Number: 8370
Timothy J. Mitchison (Medical School) 3713 and members of the Committee
Upper level Systems Biology students register for this course when they permanently join a lab.
Students should register under the supervising PI.

*Systems Biology 370. Advanced Topics in Systems Biology: Reading Seminar
Catalog Number: 43182
Timothy J. Mitchison (Medical School) 3713
A series of reading and discussion seminars, each running for a half term (7 weeks). Two seminars, which can be taken in different terms, are required for credit.

*Systems Biology 399. Introduction to Systems Biology: Rotations
Catalog Number: 5863
Timothy J. Mitchison (Medical School) 3713
Half course (fall term; repeated spring term). Hours to be arranged.
The course will introduce the research areas of faculty performing research in systems biology.
Intended for Systems Biology lab rotations.

Cross-Listed Graduate Courses of Reading and Research

*Computer Science 307,308. Biologically-Inspired Multi-Agent Systems, Distributed Systems, and Computational Biology

Quarter Courses for Graduate Students Only
*Systems Biology 301qc. Studying Evolution through Models and Experiments
Catalog Number: 31854
Roy Kishony (Medical School)
Quarter course (spring term). M. through F., 10–11:30.
Intensive January course covering theoretical foundations in population genetics, genetic drift versus selection, identifying selection in genomes, advances in laboratory evolution experiments, with applications to key questions in systems biology and evolution.
Note: January 14, 2013 - January 25, 2013. To register for this course, please contact the Systems Biology Department at SysBio.Courses@hms.harvard.edu.

*Systems Biology 302qc. Quantitative Human Physiology
Catalog Number: 14042
Vamsi K. Mootha (Medical School), John M. Higgins (Medical School), and Timothy J. Mitchison (Medical School)
Quarter course (spring term). Tu., Th., 10–11:30.
Critical discussion of research literature focusing on quantitative approaches to human disease, physiology, and therapeutics. Topics include cellular energetics and metabolism, red blood cell homeostasis and anemia, cell growth and cancer, and pharmacokinetics and pharmacodynamics.
Note: Expected to be given in 2013–14.

*Systems Biology 303qc. Dynamic and Stochastic Processes in Cells Part 1
Catalog Number: 78044
Jeremy M. Gunawardena (Medical School)
Quarter course (fall term). Tu., Th., 10–11:30, and a weekly section to be arranged. EXAM GROUP: 12, 13
We will examine how the some of the key requirements of living systems are implemented at the molecular level and how quantitative experimental methods and mathematical analysis can help us understand them.
Prerequisite: College-level calculus.

*Systems Biology 304qc. Dynamic & Stochastic Processes in Cells Part 2
Catalog Number: 93151
Johan M. Paulsson (Medical School)
Quarter course (fall term). Tu., Th., 10-11:30, a weekly section to be arranged. EXAM GROUP: 12, 13
Prerequisite: College-level calculus.

*Systems Biology 305qc. Practical Synthetic Biology - (New Course)
Catalog Number: 22318
Pamela A. Silver (Medical School)
Quarter course (spring term). M. through F., 4–6.
Synthetic biology is a new discipline that seeks to enable the predictable engineering of
biological systems. According to one conception of synthetic biology, proteins and genetic regulatory elements are modular and can be combined in a predictable manner. In practice however, assembled genetic devices do not function as expected. The purpose of the course is to go beyond the textbook, first-pass description of molecular mechanisms and focus on details that are specifically relevant to engineering biological systems.

Note: January 14, 2013 - January 25, 2013, in Warren Alpert RM 563 (on January 17, class will meet in Warren Alpert RM 436). To register for this course, please contact the Systems Biology Department at SysBio.Courses@hms.harvard.edu.

Ukrainian Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Ukrainian Studies

Michael S. Flier, Oleksandr Potebnja Professor of Ukrainian Philology (Chair)
Timothy J. Colton, Morris and Anna Feldberg Professor of Government and Russian Studies
Grzegorz Ekiert, Professor of Government
George G. Grabowicz, Dmytro Cyzevs’kyj Professor of Ukrainian Literature
Terry D. Martin, George F. Baker III Professor of Russian Studies
Serhii Plokhii, Mykhailo S. Hrushevs’kyi Professor of Ukrainian History

The Standing Committee on Ukrainian Studies oversees the systematic study in Ukrainian fields throughout the departments of the Faculty of Arts and Sciences. Students wishing to obtain a doctorate in a particular discipline of Ukrainian Studies, such as language, literature, history, or politics should first fulfill all the requirements of the department of their scholarly discipline (departments of Slavic Languages and Literatures, Linguistics, History, or Government): they may then proceed to the fulfillment of specific qualifications in the Ukrainian aspect of their disciplines under the supervision of the Committee’s faculty. Graduate students may also focus on Ukrainian Studies in the Degree of Master of Arts in Regional Studies - Russia, Eastern Europe, and Central Asia. The weekly Seminar in Ukrainian Studies serves as an interdisciplinary introduction to all aspects of Ukrainian disciplines; it is open for enrollment to graduate students, and with permission to undergraduates.

The Ukrainian Research Institute sponsors programs, events and activities of interest to both students and specialists in Ukrainian Studies. Specific questions concerning the program of Ukrainian Studies at Harvard may be addressed to the Programs Administrator of the Ukrainian Research Institute at 34 Kirkland Street, Cambridge, MA 02138.
**Primarily for Graduates**

*Ukrainian 200. Ukrainian Studies: Seminar*
Catalog Number: 7927
Michael S. Flier, George G. Grabowicz, Serhii Plokhii and staff
**Full course. M., 4–6. EXAM GROUP: 9**

Interdisciplinary seminar in Ukrainian studies with broad regional and comparative perspective. Faculty and invited scholars discuss a variety of topics in the humanities and social sciences. Background readings and follow-up discussions help students put the specific lectures in broader context. Students also conduct an individually tailored reading and research project under the guidance of a faculty advisor and in consultation with other resident specialists.

**Courses of Interest**

**Government 1203. Capitalism and Democracy in Central and Eastern Europe**
[Government 2213. Comparative Politics of Post-Socialism]
*History 82f. The Origins of the Cold War: The Yalta Conference (1945)*
History 1270. Frontiers of Europe: Ukraine since 1500
[History 1282. The Russian Revolution: An International History]
**History 1290. The History of the Russian Empire**
[History 1970. Cold War Summits: Conference Course]
[*History 2260. Central Europe: Seminar]*
[History 2271. The Soviet Union: Proseminar]
**History 2272. The Soviet Union: Seminar**
[History 2285. Imperial Russia: Proseminar]
**Linguistics 250. Old Church Slavonic**
[Linguistics 252. Comparative Slavic Linguistics]
[Literature 160 (formerly Comparative Literature 160). Literary Forgeries and Mystifications]
**Literature 164. The 20th-Century Post-Realist Novel in Eastern Europe: Conference Course**
**Slavic Ga. Beginning Ukrainian I**
**Slavic Gb. Beginning Ukrainian II**
*Slavic Gr. Supervised Readings in Intermediate/Advanced Ukrainian*
**Slavic 166. Russian-Ukrainian Literary Relations in the 19th Century: Conference Course**
**Slavic 201. Introduction to East Slavic Languages**
[Slavic 280r. Slavic Culture: Seminar]
[Slavic 290. 19th-Century Ukrainian Prose: Seminar]
Visual and Environmental Studies

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Department of Visual and Environmental Studies

D. N. Rodowick, William R. Kenan, Jr. Professor of Visual and Environmental Studies (Chair)
Dominique Bluher, Lecturer on Visual and Environmental Studies
Giuliana Bruno, Professor of Visual and Environmental Studies
Katarina Burin, Visiting Lecturer on Visual and Environmental Studies
James Casebere, Visiting Lecturer on Visual and Environmental Studies
Lucien G. Castaing-Taylor, Professor of Visual Arts and of Anthropology (on leave 2012-13)
David Chung, Visiting Professor of Visual and Environmental Studies
Tom Conley, Abbott Lawrence Lowell Professor of Romance Languages and Literatures and of Visual and Environmental Studies
Laura A. Frahm, Assistant Professor of Visual and Environmental Studies
Philippe Grandrieux, Visiting Lecturer on Visual and Environmental Studies
Haden R. Guest, Lecturer on Visual and Environmental Studies
Alfred F. Guzzetti, Osgood Hooker Professor of Visual Arts
Sharon C. Harper, Associate Professor of Visual and Environmental Studies (Director of Undergraduate Studies)
Chris Killip, Professor of Visual and Environmental Studies
Carrie Lambert-Beatty, Professor of History of Art and Architecture and of Visual and Environmental Studies (Director of Graduate Studies)
Annette Lemieux, Senior Lecturer on Visual and Environmental Studies
Ruth S. Lingford, Senior Lecturer on Visual and Environmental Studies (on leave fall term)
Scott MacDonald, Visiting Professor of Visual and Environmental Studies (Hamilton College)
Terah Lynn Maher, Visiting Lecturer on Visual and Environmental Studies
Mike Steven Mandel, Visiting Lecturer on Visual and Environmental Studies
Ross McElwee, Professor of the Practice of Filmmaking
Helen Mirra, John L. Loeb Associate Professor of the Humanities (on leave fall term)
Robb Moss, Senior Lecturer on Visual and Environmental Studies
Stephen Prina, Professor of Visual and Environmental Studies
Matthew Saunders, Visiting Lecturer on Visual and Environmental Studies
Amie Siegel, Associate Professor of Visual and Environmental Studies (on leave fall term)
John R. Stilgoe, Robert and Lois Orchard Professor in the History of Landscape Development (on leave 2012-13)

Other Faculty Offering Instruction in the Department of Visual and Environmental Studies
Svetlana Boym, Curt Hugo Reisinger Professor of Slavic Languages and Literatures and Professor of Comparative Literature
Haden R. Guest, Lecturer on Visual and Environmental Studies
Eric Rentschler, Arthur Kingsley Porter Professor of Germanic Languages and Literatures
Mary M. Steedly, Professor of Anthropology

The curriculum of the Department of Visual and Environmental Studies engages both practical and theoretical aspects of the built environment, digital media, drawing, film, painting, performance, photography, printmaking, sculpture, sound, video, and writing.

Most introductory-level courses are designated with two-digit course numbers and non-introductory courses with three-digit course numbers. The department also offers 200-level courses for PhD students in the Film and Visual Studies graduate secondary field.

Tutorials or special research projects may be taken only if they have been approved by the Director of Undergraduate Studies. Application forms for all VES tutorials can be picked up in the VES Department Office or downloaded from the VES website at www.ves.fas.harvard.edu.

In addition to the studio and lecture courses taught by members of the faculty of Visual and Environmental Studies, the department encourages students to explore course opportunities at the MIT Institute for Advanced Visual Studies as well as the Harvard Graduate School of Design.

Each term the department sponsors a lecture series held at the Carpenter Center for the Visual Arts. These lectures are designed to augment and inform the curriculum of the department and are usually held on Thursday evenings.

For further information on the faculty and courses in the Department of Visual and Environmental Studies, requirements for concentration, as well as the Carpenter Center lecture series, please contact the department office located on the 1st Floor of the Carpenter Center for the Visual Arts, 24 Quincy Street or visit our website at www.ves.fas.harvard.edu.

**Primarily for Undergraduates**

*Visual and Environmental Studies 10a. Drawing 1*
Catalog Number: 6945 Enrollment: Limited to 12.

*Katarina Burin*

_Half course (full term; repeated spring term). M., W., 10–1._
A studio course to build the skills of drawing incrementally and expand students’ visual vocabulary. Drawings will be made from life, photographs and invention. Emphasis will be placed on enhancing our observational sensibilities, focusing on all aspects of technical development, particularly the importance of line. Assignments will delve into the development of abstract and conceptual principles, and introduce specialized systems of rendering and notation. The aim is to expand drawing skills with intention and purpose.

*Note:* This class is for beginners or anyone furthering their skill level.
*Visual and Environmental Studies 10br. Drawing 2
Catalog Number: 57371 Enrollment: Limited to 12.
Katarina Burin
Half course (fall term; repeated spring term). M., W., 3–6.
An intermediate studio course to build upon basic skills, while exploring various methods and modes of drawing. Emphasis will be placed on individual projects and developing a body of work. This course considers drawing as both an immediate and mediated form, with distanced and nuanced potential. Exploring drawing as an expanded field, as process and installation, students can use various transfer techniques and incorporate found imagery—combining traditional skills and contemporary practice.
Note: This course may be taken as continuation of Drawing 1 or as a stand-alone course.
Prerequisite: At least one VES studio half-course or permission of the instructor.

*Visual and Environmental Studies 15ar. Silkscreen: Studio Course
Catalog Number: 2262 Enrollment: Limited to 12.
Annette Lemieux
Half course (fall term). Tu., Th., 10–1.
For the student who is interested in the manipulation of found and original imagery. Students will create monotypes on paper and other surfaces utilizing the silkscreen process. Through slide presentations, the class will be introduced to the work of artists such as Rauschenberg and Warhol, as well as others who use the silkscreen process.
Note: No previous studio experience necessary.

*Visual and Environmental Studies 18. Works on Paper - (New Course)
Catalog Number: 77946 Enrollment: Limited to 12.
Annette Lemieux
Half course (spring term). Tu., Th., 2-5.
Through image presentations, students will be introduced to the art movements and artists of the 20th and 21st centuries. Using a variety of materials, students will create works on paper for critique that reflect these artists’ beliefs and concerns.

*Visual and Environmental Studies 19. Graphic Novels: Studio Course
Catalog Number: 32596 Enrollment: Limited to 12.
Peter Alan Kuper
Half course (spring term). Th., 1-4, and weekly film screenings F., 1-3.
From the history to the mechanics, this course will explore the origins of graphic novels and how to apply this medium in literary and artistic ways. Classes will include presentations and lectures on important historical and current work as well as practical assignments. For students interested in acquiring an understanding of cartooning history as well as those interested in developing their own work for publication, this course will provide a strong foundation.
Note: Expected to be given in 2013–14.

*Visual and Environmental Studies 21s. New Grounds: Painting Studio Course
Catalog Number: 75974 Enrollment: Limited to 12.
Matthew Saunders
Half course (fall term). Tu., 1–4, Tu., 6–9 p.m.
What role does a studio "foundation" play in a technologically and ideologically diverse moment? This will be a painting foundations course, with an emphasis on building skills and exposure to different materials and methods; yet, we also aim to question what the grounds for a painting practice could be, with consideration of conceptual and personal motivation, technical proficiency, and openness to process and experimentation.

*Expected to be given in 2013–14. Open to beginners, while also appropriate for more advanced students.

**Visual and Environmental Studies 23. Conceptual Figure - (New Course)**
Catalog Number: 11317 Enrollment: Limited to 12.
Matthew Saunders
Half course (fall term). W., 1–5, W., 6–8 p.m.
Model, Person, Subject, Self, Cipher, Being, Effigy, Corpse, Anatomy, Portrait, Body. This painting course will delve into many ways of approaching the human figure. Working first from life, we will also consider the body in media, the body in history, the body in ideas. Note: Open to beginners, while also appropriate for more advanced students.

**Visual and Environmental Studies 24. Painting, Smoking, Eating**
Catalog Number: 78679 Enrollment: Limited to 12.
Matthew Saunders
Half course (spring term). Tu., 1–4, Tu., 6–8 p.m.
Titled after Phillip Guston, this course has two agendas: technical assignments that improve your ability to move paint around, and laying conceptual groundwork for personal projects. One task of an artist is to have a relationship with a world. We will discuss the social role of artists and the boundaries between interior and exterior discourse, with an emphasis on artists’ writing, both critical and self-reflexive, treating self-expression as well as abnegation: auteurs, flaneurs, ventriloquists.

**Visual and Environmental Studies 35r. Building Thought: Studio Course**
Catalog Number: 44695 Enrollment: Limited to 12.
Annette Lemieux
Half course (fall term). Tu., Th., 2-5.
Using a variety of materials and methods, students will build and create artworks that reflect their ideas, with an emphasis and understanding of the language of images, materials, forms, actions, and presentation. Through images, videos, and informal discussions, students will be introduced to the concerns of conceptual artists of the 20th Century to the present.

**Visual and Environmental Studies 37. Lay of the Land: Studio Course**
Catalog Number: 3090 Enrollment: Limited to 12.
Stephen Prina
The pursuit of and response to the horizontal in art will be the focus of this studio class. To cite a few examples, abstract expressionist painting, cartography, earthworks, landscape photography, 19th century German Romantic landscape painting, and Rayograms will provide models of the horizontal that will be points of departure for studio projects, the forms of which will be determined by what the investigation provides. Students will shift medium from project to
 [*Visual and Environmental Studies 38. Baggage: Studio Course]
Catalog Number: 43153 Enrollment: Limited to 12.
Andrew B. Witkin
Half course (spring term). M., 1-4 pm, and additional times to be arranged.
Engaging personal and public notions of authorship, veracity, legibility, history and value, this class focuses on exploration and performance in collecting. Students will examine possibilities and patterns to understand choice, advice, intuition and peculiarity with the goal of better communication. Sources include information distribution models, history, exhibitions in and out of art contexts and a focus on comfort. This will aid students in investigations into personal and collaborative projects employing a variety of media, methods and modes.
*Note: Expected to be given in 2013–14. No previous studio experience necessary. Students from other disciplines are highly encouraged to take the course.

*Visual and Environmental Studies 39. How to do words with things: Studio Course - (New Course)*
Catalog Number: 25257 Enrollment: Limited to 12.
Helen Mirra
Half course (spring term). Tu., Th., 2–5, additional hours to be arranged.
A course with alternating and interdependent writing and object-making, reading and looking activities. J L Austin’s classic text *How to do things with Words* will be our starting point.
*Prerequisite:* While no previous VES courses are necessary, experience with experimentation in either visual or textual forms is.

*Visual and Environmental Studies 40a. Introduction to Still Photography: Studio Course*
Catalog Number: 2010 Enrollment: Limited to 20.
Fall: Chris Killip and Mike Steven Mandel (spring term); Spring: Chris Killip and Mike Steven Mandel (spring term) and Michael Mandel
Half course (fall term; repeated spring term). M., W., 9–12; or M., W., 1–4.
Introduction to still photography through individual and group exercises, with an emphasis on the medium as a vehicle for expression, documentation, and personal vision. Covers necessary technical, historical, and aesthetic aspects of the medium.
*Note: No previous studio experience necessary.*

*Visual and Environmental Studies 41a. Introduction to Still Photography: Studio Course*
Catalog Number: 0705 Enrollment: Limited to 10.
Sharon C. Harper
Half course (fall term; repeated spring term). Fall: Tu., Th., 1–4; Spring: Tu., Th., 9–12.
Introduction to still photography with an emphasis on the medium as a vehicle for expression and personal vision. Covers technical, historical, and aesthetic aspects of the medium. Class is organized around slide lectures, individual meetings, group critiques, and readings.
*Note: No previous studio experience necessary.*
*Visual and Environmental Studies 41br. Photographic Inquiry: Studio Course
Catalog Number: 9484 Enrollment: Limited to 10.
Sharon C. Harper
Half course (spring term). Tu., Th., 1-4.
Class emphasis will be on developing visual ideas for a self-directed photographic project. Class will be structured around regular critiques, individual meetings, readings, class discussions and museum visits. Students will create a group of photographs for a final project that are the result of a sustained, self-directed creative process.
Prerequisite: At least one half-course in photography or permission of the instructor.

*Visual and Environmental Studies 50. Introduction to Nonfiction Filmmaking
Catalog Number: 4907 Enrollment: Limited to 10.
Robb Moss
Full course. Tu., 1–4, Th., 1–5.
Introductory exercises in live-action filmmaking culminating in the production of a nonfiction film as a group project in the spring term.

*Visual and Environmental Studies 51a. Introduction to Video: Studio Course
Catalog Number: 7526 Enrollment: Limited to 10.
Ross McElwee
A series of nonfiction projects, both individual and collaborative, designed to introduce and explore the range of expressive possibilities in digital video.

*Visual and Environmental Studies 52r. Introduction to Nonfiction Videomaking
Catalog Number: 87233 Enrollment: Limited to 10.
Alfred F. Guzzetti (fall term) and Robb Moss (spring term)
Half course (fall term; repeated spring term). Fall: Tu., Th., 1–4; Spring: M., W., 1–4.
Individual and collaborative projects in nonfiction video designed to explore the range of possibilities from the conventional to the experimental, and to develop the student’s creative control over recording and editing images and sounds.
Note: The course will meet Tuesday, Sept. 4 from 1pm-2pm in Sever 415. There will be no Thursday meeting.

*Visual and Environmental Studies 53ar. Fundamentals of Animation: Studio Course
Catalog Number: 1360 Enrollment: Limited to 10.
Terah Lynn Maher
Half course (fall term). Th., 1-5, and weekly film screenings F., 1-3.
An introduction to the possibilities of animation. Using a mixture of traditional and 2D digital tools, students will complete practical exercises which will familiarize them with basic skills and techniques. Screenings and discussions will help develop the specialized thinking needed to understand the discipline.
Note: Drawing skills are optional, though helpful.

[*Visual and Environmental Studies 54s. Animating Science]*
Catalog Number: 83728 Enrollment: Limited to 10.
Ruth S. Lingford and Alain Viel  
**Half course (spring term). Tu., 1-5, and weekly film screenings F., 1-3.**  
This hands-on class will investigate the cross-overs between science and animation. How can animation communicate abstract ideas? How can science inspire the artist? Students will acquire some fundamental animation skills, and will work on individual and group projects. This class will be suitable for students with an interest either in science or visual art, or both.  
*Note: Expected to be given in 2013–14.*

*Visual and Environmental Studies 55g. Screenwriting: Readable/Visible - (New Course)*  
Catalog Number: 56638 Enrollment: Limited to 12.  
Philippe Grandrieux  
**Half course (spring term). W., 4–6.**  
What should one write knowing that what will eventually be filmed, cannot be adequately conveyed through words? Beginning with this this question, we will explore the various elements of screenwriting, including the construction of scenes, characters, story, and dialogue. Students will complete a screenplay, or part of a screenplay, which will reflect their own cinematic style.  

[*Visual and Environmental Studies 56s. Animation/Studio]*  
Catalog Number: 14755 Enrollment: Limited to 10.  
Matthew Saunders  
**Half course (fall term). M. 1-5, and weekly film screenings F. 1-3.**  
Assailing animation, from the studio. Topics include the animated potential of the still image, both to reflect continuum, and in modes of repetition, including series, sequence and seriality. In discussions of the moving image, "Animation" will be treated broadly as a strategy of synthetic filmmaking. Assignments include painting and drawing - with an emphasis on expanding materials and harnessing styles - as well as collage, montage, slide works, and short videos/animations.  
*Note: Expected to be given in 2013–14.*

[*Visual and Environmental Studies 57r. Maya and Multi Media]*  
Catalog Number: 4275 Enrollment: Limited to 10.  
Allen H Azar Sayegh  
**Half course (fall term). M. 1-5, and a weekly screening F. 1-3.**  
This course will offer a basic introduction to 3D Computer animation, and explore hybrid forms of animation and the new thinking they enable.  
*Note: Expected to be given in 2013–14.*

*Visual and Environmental Studies 59. The Science of Fiction*  
Catalog Number: 90016 Enrollment: Limited to 10.  
Amie Siegel  
**Half course (spring term). Tu., Th., 1–4.**  
A course in narrative fiction film production, emphasizing experimental and conceptual forms, literary adaptation and artist-filmmakers. Students push the artistic boundaries of filmmaking, each student writes, directs and edits several exercises as well as creating a short film. We then throw out our scripts and work in improvisatory, associative modes. We look closely at structure,
performance and genre—melodrama, sci-fi, western. Students learn techniques of camera, lighting, sound and editing. Student work is discussed extensively in class.

*Visual and Environmental Studies 60x. Video Production: Subject/Object*

Catalog Number: 21952 Enrollment: Limited to 10.

Philippe Grandrieux

*Half course (fall term).* M., W., 1–4.

Cinema’s primary action is to film what is in the world — reality, the real, the presence of things. In this beginning fiction filmmaking course, students experiment with different ways to find the right sensorial distance with the subject of their film. A filmmaker’s relationship with his or her subject is at once psychical, ethical, and physical. In this course, students will try different strategies to transform their subjects into cinematic objects.

[*Visual and Environmental Studies 61m. Sound in Time, Sound in Space: Studio Course*]

Catalog Number: 81384 Enrollment: Limited to 10.

Marina Rosenfeld

*Half course (spring term).* M., 3-5 and 6-8, and a weekly lab to be arranged.

Students will produce short works exploring contemporary currents in sound installation, so-called "sound art," and related extra-musical sonic forms. Techniques include sound diffusion, localization, amplification, composition, repetition, performance and capture. No previous studio or music experience necessary.

*Note:* Expected to be given in 2013–14. Permission of instructor required.

[*Visual and Environmental Studies 62. Film Fatale: Sculpture, Performance and Video Essay*]

Catalog Number: 73367 Enrollment: Limited to 10.

Amie Siegel

*Half course (fall term).* M., 1-3, W., 1-4.

A studio art course on the avant-garde film and performance work of women artists and filmmakers including Babette Mangolte, Yvonne Rainer, Valie Export, Helke Sander, Chantal Akerman, Agnes Varda, Mary Kelly, Adrian Piper, Nancy Graves, Hannah Wilke, Martha Rosler and Marina Abramovic. We will study the interaction between sculpture, performance and cinema, as well as the "essay film" that shudders on the edge of fiction, documentary and performance. Appropriate for students of art history, film studies, visual art and video as well as the curious and committed.

*Note:* Expected to be given in 2013–14. Priority will be given to students who have completed at least one VES course in photography, film or video, but no previous video experience is required.

[*Visual and Environmental Studies 65. Tactics—Art, Politics and Performance: Studio Course*]

Catalog Number: 0143 Enrollment: Limited to 10.

Amie Siegel

*Half course (spring term).* Tu., 1-4, Th., 1-3.

An introductory video course that asks what makes a work of art political? Through student creation of individual and collective works, as well as reading, discussion, performance, critique
and viewing, we examine (and enact) approaches to the social sphere. Over the arc of the semester, students will focus on various tactics of radical art and disturbance, participating in workshops on performance, artist collectives, appropriation and cultural critique, from which may spring forth manifestoes, actions, insertions. Special focus on video as research instrument, inscription of occurrence, performance mirror, subjective essay, and mixing turntable for heterogeneous materials.

*Note:* Expected to be given in 2013–14. One half-course in film, video or performance useful but not required.

**[Visual and Environmental Studies 68a (formerly *Visual and Environmental Studies 68). Delirious Montage 1: Still]**

Catalog Number: 21845 Enrollment: Limited to 10.

*Amie Siegel*

*Half course (fall term). Tu. 1-4, Th. 10-12.*

How do images shift when juxtaposed with one another? In this studio course, we use photography, archival images, and appropriated or "found" images and material in the production of our own art works. Participants explore collage, photomontage, pastiche and slide projection, working with still images in multiple forms to consider shifts of meaning. We will take in artists’ various approaches to image juxtaposition, including those who engage via narrative, association, chance, serial, rebus and photo-roman.

*Note:* Expected to be given in 2013–14. Useful for beginning students in visual art and film/video as well as more advanced practitioners.

**[Visual and Environmental Studies 68b. Delirious Montage 2: Moving]**

Catalog Number: 69138 Enrollment: Limited to 10.

*Amie Siegel*

*Half course (spring term). Tu., 1-4, Th., 10-12.*

How do rhythm, pacing, and structure function in cinema? This studio course continues concerns of image juxtaposition from the fall semester, yet gives in-depth focus to working--as an artist, a filmmaker, an editor--with moving images. From shot-reverse-shot to the "soft montage" of video installation, we consider various approaches to editing in fiction films, documentaries, and moving image installations. Course participants work on multiple projects, refining their relationship to film and video materials.

*Note:* Expected to be given in 2013–14. Useful for beginning students in visual art and film/video as well as more advanced practitioners.

**[Visual and Environmental Studies 69. Film-Video-Sound Installation]**

Catalog Number: 39559 Enrollment: Limited to 10.

*Carolyn Tribe*

*Half course (fall term). M., W., 1–4.*

A studio course in which to consider time-based art in the gallery. We will investigate multi-channel challenges, editing for a viewer that can come and go, instantaneity, bandwidth and boredom. The class will include presentations and screenings of contemporary work and some reading, but the emphasis will be on developing individual projects.

*Note:* Expected to be given in 2013–14. Priority given to students with some experience in film, video or sound. Permission of instructor required.
**Visual and Environmental Studies 70. The Art of Film**  
Catalog Number: 4249  
Laura A. Frahm  
Half course (fall term). M., W., at 10, a weekly film screening Tu., 7-9, and a weekly section to be arranged.  
An introduction to film style and aesthetics with a focus on developing critical and formal analytical skills. Through readings and screenings of a broad range of films, the class examines the primary visual, aural, and narrative conventions by which motion pictures create and comment upon significant social experience. Issues of mise-en-scène, framing, image composition, photographic space, editing, sound, narrative structure, and point of view will be discussed as components of cinematic style and meaning.  
**Note:** No background in film history or theory necessary. Required for all students concentrating in Film Studies.

**Visual and Environmental Studies 71. Silent Cinema**  
Catalog Number: 1971  
Laura A. Frahm  
Half course (spring term). Tu., Th., 10-11, a weekly film screening M., 4-6, and a weekly section to be arranged. EXAM GROUP: 12  
This course will survey the development of the film medium and the film industry from the beginnings in the 1890s up to the conversion to sound in the late 1920s, covering key textual and institutional transformations and tying these together with the broader cultural and social context in which films were made, exhibited, and understood. We will discuss the main national schools and international trends of filmmaking.  
**Note:** No background in film history or theory necessary. Required for all students concentrating in Film Studies.

[Visual and Environmental Studies 72. Sound Cinema]  
Catalog Number: 6997  
Rebecca Anne Sheehan  
Half course (spring term). M., W., 11; screenings M. 4-6p.m., and a weekly section to be arranged.  
How does sound change what we see? What new stories become possible? How does the space of cinema change between 1930 and 1960? What happens when we throw color and widescreen into the mix? We’ll seek answers to these questions while investigating the political and industrial contexts of international masters of the medium. Films and filmmakers include: *The Blue Angel, Citizen Kane, Rashomon, The Red Shoes;* Busby Berkeley, Hitchcock, Satyajit Ray, Ozu, and Antonioni.  
**Note:** Expected to be given in 2013–14. No background in film history or theory necessary. Required for all students concentrating in Film Studies. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

*Visual and Environmental Studies 80. Loitering: Studio Course*  
Catalog Number: 9394 Enrollment: Limited to 12.  
Stephen Prina  
Half course (fall term). Tu., Th., 1–4.
You will hang out in the vicinity of culture and make things in response to it. This class is not thematic or linked to any particular discipline.

*Note:* No previous studio experience necessary.

[*Visual and Environmental Studies 81. Post-studio Studio]*  
Catalog Number: 91081 Enrollment: Limited to 12.  
Mungo Thomson  
*Half course (fall term). Tu., Th., 1–4.*

Nomadic, laptop-based methods of producing and exhibiting art have rendered the traditional studio increasingly marginal to many art practices. How do artists function in, and address, this expanded field for both the production and reception of art? A production-based course that will take place in and around the studio. Media will shift by project but some drawing and scheming will be constant.

*Note:* Expected to be given in 2013–14.

[*Visual and Environmental Studies 83. The Devil, Probably x 10 + 1: A Studio-based Seminar - (New Course)*  
Catalog Number: 93053 Enrollment: Limited to 12.  
Stephen Prina  
*Half course (spring term). Tu., 1–4, Thu., 1–4.*

Part 1 is a weekly studio session during which participants will create 3 projects in any medium or discipline during the term. Part 2 is a screening of the film "The Devil, Probably," 1977 by Robert Bresson for 10 consecutive weeks, interrupted by the 3 project class presentations. Different readings will accompany each screening. The final screening--+1--is "The Third Generation," 1979 by Rainer Werner Fassbinder.

*Note:* The studio projects do not need to pertain to the Bresson/Fassbinder screenings.  
*Prerequisite:* There are no prerequisites for the class. First year participants are encouraged to apply.

[*Visual and Environmental Studies 90c (formerly VES 90c. The History of Now). Art and Historical Memory, 1980-the Present]*  
Catalog Number: 2994 Enrollment: Limited to 12.  
Carrie Lambert-Beatty  
*Half course (fall term). W., 2–4.*

What is it about the present that is making so many artists interested in the past? How do personal and public memory take form in art, now? This art history/criticism seminar will discuss practices that range from re-staging recent riots to reciting historical speeches, modifying museums to inventing historical figures, as we explore art’s current contribution to our understanding of the past.

*Note:* Expected to be given in 2013–14.

[*Visual and Environmental Studies 92. Contemporary Art]*  
Catalog Number: 53514  
Carrie Lambert-Beatty  
*Half course (spring term). Tu., Th., at 11. Weekly section to be arranged. EXAM GROUP: 13*  
Art of the last fifty years, with an eye to issues facing artists working today. Pop, Minimalism,
Conceptual Art, Installation, and New Media: in surveying these and other developments in recent art, lecture-based class will address such topics as modernism/postmodernism; changing models of artistic work and artists’ identity; and globalization and the art world.

*Note:* Expected to be given in 2013–14. Recommended for VES concentrators.

**Visual and Environmental Studies 96r. Directed Research: Studio Course**  
Catalog Number: 7299  
Enrollment: Limited to 10.  
Stephen Prina  
Half course (fall term; repeated spring term). W., 6-9 pm, and additional hours to be arranged. 
This course is intended for students who have developed the beginnings of a practice they are prepared to pursue. The motive is to assemble a group of disparate artists who come together to exchange thoughts across disciplines: painting next to photography next to writing next to filmmaking, and so on.

*Note:* Recommended for concentrators in Visual and Environmental Studies in their junior and senior year but also open to others with permission of the instructor.

**Tutorials, Projects, and Research**

Preparation for thesis is begun in studios and seminars and is carried to completion in a VES 99 tutorial during the senior year. *In rare instances* students needing special preparation not available in regularly offered courses can enroll in an optional junior or even sophomore tutorial, or a special projects course. Tutorial proposals will be considered by the Director of Undergraduate Studies only with written permission of the project adviser and if the material to be covered is substantially different from other departmental offerings. Ordinarily, tutorial proposals must be submitted before Study Cards are due. Check the department calendar for due dates.

Alternatively, students may wish to consider *Visual and Environmental Studies 96r, Directed Research*, which is intended for students who have developed the beginnings of a practice they are prepared to pursue. Please see course description above.

**Visual and Environmental Studies 91r. Special Projects**  
Catalog Number: 9183  
Sharon C. Harper and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged. 
Open to a limited number of students who wish to carry out a special project under supervision. Students wishing to enroll in VES 91r must find a member of the faculty to advise the project and submit an application to the Director of Undergraduate Studies.

*Note:* Letter-graded only. Special Project tutorials are led by individual faculty members; however study cards should be signed by the Director of Undergraduate Studies.

**Visual and Environmental Studies 97r. Tutorial - Sophomore Year**  
Catalog Number: 0450  
Sharon C. Harper and members of the Department  
Half course (fall term; repeated spring term). Hours to be arranged.  
Individual instruction in subjects of special interest that cannot be studied in regular courses.
Concentrators wishing to take a tutorial in their sophomore year must find a member of the faculty to advise the project and submit an application to the Director of Undergraduate Studies.

*Visual and Environmental Studies 98r. Tutorial - Junior Year
Catalog Number: 1411
Sharon C. Harper and members of the Department
Half course (fall term; repeated spring term). Hours to be arranged.
Individual instruction in subjects of special interest that cannot be studied in regular courses. Concentrators wishing to take a tutorial in their junior year must find a member of the faculty to advise the project and submit an application to the Director of Undergraduate Studies.

Note: Optional for junior concentrators. Letter-graded only. Tutorials are led by individual faculty members; however study cards should be signed by the Director of Undergraduate Studies.

*Visual and Environmental Studies 99. Tutorial - Senior Year (Thesis/Senior Project)
Catalog Number: 5141
Sharon C. Harper and members of the Department
Full course. Hours to be arranged.
All students wishing to undertake a VES 99 project must have permission of the project adviser before being considered. The Director of Undergraduate Studies must approve all VES 99 projects and all theses must be approved by the VES Honors Board in advance.

Note: Optional for senior concentrators. Letter-graded only. Students must be enrolled in VES 99 to do a thesis. Students should arrange regular tutorial meetings with their project adviser. Senior theses and projects are led by individual faculty members; however study cards should be signed by the Director of Undergraduate Studies.

For Undergraduates and Graduates

[*Visual and Environmental Studies 104. Culture Jam: Art and Activism since 1989: Seminar]
Catalog Number: 1066 Enrollment: Limited to 12.
Carrie Lambert-Beatty
We are living through a period of remarkable creativity in political expression: from anti-consumerism TV ads to imposter websites; “billboard liberation” to faux corporations, digital hijacking to lifestyle performance. Sometimes labeled art, sometimes not, these activities have sources in both political and art history. In this history/theory seminar we will ask: Where is the line between art and activism today? And how are we to evaluate the efficacy, ethics, and aesthetics of the new hybrids?

Note: Expected to be given in 2013–14. Primarily intended for junior and senior concentrators in Visual and Environmental Studies, but others admitted with permission of the instructor.
Catalog Number: 7883 Enrollment: Limited to 20.
John R. Stilgoe
North America as an evolving visual environment is analyzed as a systems concatenation involving such constituent elements as farms, small towns, shopping malls, highways, suburbs, and as depicted in fiction, poetry, cartography, television, cinema, and advertising and cybernetic simulation.
Note: Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 4105.

Visual and Environmental Studies 108. Stranger than Fiction
Catalog Number: 23387 Enrollment: Limited to 15.
Carrie Lambert-Beatty
Half course (fall term). Tu., 1–3.
Much recent art stages slippages between the fictive and factual. False personas, invented histories and museums of unnatural history are some such creative deceptions — so are Punk’d, Borat, and Fear Factor. With a focus on installation art, photography, video, and performance but an eye to popular culture and political scandal, this seminar will trace artistic precedents for treating our sense of reality as a plastic material, and explore the ethical, political, and aesthetic implications.

Visual and Environmental Studies 115. Printed Matters: Studio Course
Catalog Number: 38924 Enrollment: Limited to 12. Permission of instructor required.
Matthew Saunders
Half course (fall term). Tu., 1–5, Tu., 6–8 p.m.
Painting’s productive association with the technologies of reproduction. We will think both pre- and post-20th century, considering the analogue (intaglio printing, especially etching and aquatint; also block, book and commercial printing) and digital as worthy collaborators. Workshops in technique will support independent projects in any media.
Prerequisite: At least one VES studio half-course.

Visual and Environmental Studies 123r. Post Brush: Studio Course
Catalog Number: 7463 Enrollment: Limited to 12.
Annette Lemieux
Half course (spring term). Tu., Th., 10–1.
Using the silkscreen printing process, students will create paintings and objects that incorporate images and text found in popular culture. Through slides, videos and informal discussions, students will be introduced to the Pop artists of the 20th century as well as other contemporary artists.
Prerequisite: At least one VES studio half-course or permission of the instructor.

Visual and Environmental Studies 125. Surface Tensions
Catalog Number: 27157
Matthew Saunders
**Half course (spring term). W., 1-5, 6-8.**

“Surface” considered as formal quality and useful tool. Whether taken to mean literal materials, the chain of ideas cohering a body of work, or painting’s Teflon-like durability as cultural tradition, we’ll pursue strategies to engage surface: seriality, alternative supports, facture/blur; mechanical tools, casualness and formality. Of particular interest are the challenges posed by seamlessness both in photographic sources and in conversations surrounding abstraction. Emphasis on painting, but other disciplines are welcome.

**Prerequisite:** At least one VES half-course in studio, or permission of the instructor.

[*Visual and Environmental Studies 125s. Postcards from Volcanoes: Studio Course*]

Catalog Number: 54031 Enrollment: Limited to 12. Permission of instructor required.

Matthew Saunders

**Half course (spring term). Tu., 1–5 and 6–8.**

This is an intermediate painting class grounded in individual projects and group critique. Not limited to conventional forms, we will think broadly about the edge between inchoate material and inscribed meaning. Studio work will be coupled with abundant reading and discussion.

**Note:** Expected to be given in 2013–14.

**Prerequisite:** At least one VES studio half-course or permission of instructor.

[*Visual and Environmental Studies 136f. Rambling in the Expanded Field: Studio Course - (New Course)*]

Catalog Number: 64638 Enrollment: Limited to 12.

Helen Mirra

**Half course (spring term). F., 10–12, F., 1–4.**

A course with a focus on endeavors which will take place outdoors, from which studio practices may be developed. Walking, as a way to somewhere and a way from somewhere, as a way to find materials or as a material itself, will be an essential component of the class. No previous studio experience necessary.

**Note:** Special First Meeting: Wednesday, January 30, 1 to 2 pm in Carpenter Center 2nd Floor Studio.

[*Visual and Environmental Studies 137x. Interrogative Design: Animating Monuments Department of Architecture Seminar Workshop*]

Catalog Number: 40252 Enrollment: Limited to 16.

Krzysztof Wodiczko (Design School)

**Half course (fall term). Tu., 3–6.**

This workshop-seminar is based on development of artistic and design projects supported by readings, discussions and reviews as well as responses and input from guest consultants and critics. Media experiments and artistic interventions engaging existing public statues and monuments are a critical part of the course as it focuses on the ways in which designers and artists can help the "entrenched in the past" monuments to become relevant, meaningful, and critically useful in the present.

**Note:** Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 2483. Please follow the class admission policy as instructed by the Graduate School of Design. Members of the VES department cannot sign undergraduate study cards for this course.
*Visual and Environmental Studies 139. Artist Research Group: Investigative Practices*
Catalog Number: 53904 Enrollment: Limited to 12.
Amie Siegel and Katarina Burin
Half course (spring term). W., 1-4 with a weekly lab to be determined.
This studio course considers how artists make use of documentation, research inquiries and archive materials in their work. Taking Le Corbusier’s Carpenter Center--history, controversy, use--as a topic, we will further consider building as projection of self, architecture as reflection of time, the document as "fact" versus fiction. Students work in diverse mediums, focusing on how research documentation relates to video and installation practices, and drawing: mark-making to generate knowledge, presentation and visual diagram.
*Note:* Expected to be given in 2013–14. This course is open to undergraduates who have taken a prior course in VES studio; film/video; film studies or art history, as well as graduate students in related fields, or by permission of the instructors. Cross-disciplinary concerns are encouraged.

*Visual and Environmental Studies 141r. Time, Space, Motion and Still Photography*
Catalog Number: 10898 Enrollment: Limited to 10.
Sharon C. Harper
A response to the place where motion and still photography approach one another will be the focus of this studio class. A phenomenological approach to image making will be emphasized to upend ideas of time, space and motion. Artists who raise these issues including Robin Rhodes, Michael Wesley, Tacita Dean, Bill Viola and Hiroshi Sugimoto will provide grounding for experimental student-directed projects.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* At least one half course in photography or the permission of the instructor.

*Visual and Environmental Studies 143r. The Photographer as Auteur: Studio Course*
Catalog Number: 2835 Enrollment: Limited to 10.
Instructor to be determined.
Explores the way in which some photographic practitioners have questioned accepted photographic conventions and are rejecting the historical orthodoxy in favor of a more subjective statement. Each student is expected to complete a major photographic project that reveals his or her own personal photographic style and preoccupations while still retaining a direct and discernible relationship to the subject.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* At least one half-course in photography.

*Visual and Environmental Studies 145r. Photographies, Places, Politics: Seminar/Workshop*
Catalog Number: 77917 Enrollment: Limited to 10.
Deborah Bright (Rhode Island School of Design)
Half course (fall term). Tu., Th., 9-12.
Using multidisciplinary approaches, we will explore how photographic practices are critical to marketing, naming and producing social space. Course structured as a seminar comprising an active practice component where students present original research and visual projects that
illuminates issues raised in readings and discussions

Note: Expected to be given in 2013–14.

Prerequisite: VES 40a or VES 40b or equivalent preparation (portfolio presentation).

*Visual and Environmental Studies 146r. The Photographic Portrait: Studio Course
Catalog Number: 5743 Enrollment: Limited to 10.
Chris Killip
Half course (spring term). M., W., 9–12.
An examination of the practical, sociological, historical, and aesthetic issues surrounding portrait photography in parallel with the active participation of each student in his/her own photographic project.
Prerequisite: VES 40a or VES 40b or equivalent preparation (portfolio presentation).

*Visual and Environmental Studies 148r. Constructed Photo Images
Catalog Number: 2429 Enrollment: Limited to 10.
James Casebere
Half course (fall term). M., W., 1–4. EXAM GROUP: 6, 7, 8
Class will approach photography in the context of the other visual arts: as a critical and flexible medium with indistinct boundaries. Emphasis will be on the photo as a freely constructed fiction and its use in combination with other materials by contemporary artists.
Prerequisite: At least one half-course in VES or permission of the instructor.

*Visual and Environmental Studies 150ar. Video Production: Sensation/Emotion
Catalog Number: 4692 Enrollment: Limited to 10.
Philippe Grandrieux
Half course (fall term). Tu., Th., 1–4.
In this intermediate course in fiction filmmaking, we will experiment with directing actors, framing, lighting, sound, and montage. We will explore the complex and powerful relationship between sensation and emotion that are at the heart of cinema. We will also consider the relationship between writing, screenplay, and mise-en-scène. Students will develop projects that may be narrative, documentary, or experimental in origin, but which will result in a fiction film.
Prerequisite: VES 50 or two other film or video courses.

*Visual and Environmental Studies 150br. Video Production: Writing/Filming
Catalog Number: 3934 Enrollment: Limited to 10.
Philippe Grandrieux
In the spring term, the fiction films that were conceived and developed in VES 150ar will be made. Students will prepare (including casting and location scouting) and finish their own film. Screenplays will be rewritten, allowing the films to remain open and alive: shooting is not the implementation of a screenplay but rather its critique. After shooting, students will complete their projects in post-production (editing and mixing). Students may collaborate with each other, as needed.
Prerequisite: VES 150ar.
*Visual and Environmental Studies 151br (formerly *Visual and Environmental Studies 51br). Nonfiction Video Projects: Studio Course
Catalog Number: 3838 Enrollment: Limited to 10.
Ross McElwee
Working from a proposal approved in advance by the instructor, each student plans, shoots, and edits a documentary video of his or her design. Shooting should take place over the summer and editing during the fall term. Readings and screenings augment individual work.
Note: In exceptional cases, a student will be permitted to take the course without having filmed over the summer, but the student must have a specific proposal for a documentary that can be both shot and edited during the term. An interview with the instructor is required for admission.
Prerequisite: At least one VES half-course in live-action film or video.

[*Visual and Environmental Studies 151n. Life of an Urban Neighborhood: Studio Course]
Catalog Number: 17489 Enrollment: Limited to 10.
Alfred F. Guzzetti
Half course (fall term). Tu., Th., 10-1.
Using two channels of video and multiple channels of sound, students in the course will work collaboratively to create an installation documenting the life of a nearby urban neighborhood, including its people, activities, public and private spaces, and institutions.
Note: Expected to be given in 2013–14.
Prerequisite: Prior experience in sound composition or video recommended but not required. This course can serve as an introductory class in video production.

[*Visual and Environmental Studies 152r. Intermediate Video Workshop: Studio Course]
Catalog Number: 8012 Enrollment: Limited to 10.
Alfred F. Guzzetti
Half course (spring term). Tu., 1–4; Th., 1–4.
An extended nonfiction or experimental video project of the student’s design, supplemented by brief exercises aimed at exploring the capabilities of the medium.
Note: Expected to be given in 2013–14. Students seeking to enroll should come to the first class meeting with a proposal for a video project to be completed in the course.
Prerequisite: One VES half-course in video production.

*Visual and Environmental Studies 153ar. Intermediate Animation: Making an Animated Film: Studio Course
Catalog Number: 5211 Enrollment: Limited to 10.
Terah Lynn Maher
Half course (fall term). W., 1-5, and weekly film screenings F., 1-3.
This course offers returning animators a chance to extend and deepen skills and understanding of animation and to make a more substantial piece of work. Additional exercises encourage students to challenge themselves and explore a range of creative possibilities.
Prerequisite: This class welcomes students with any previous animation/video/or filmmaking experience.
*Visual and Environmental Studies 153br. Intermediate Animation Workshop: Studio Course
Catalog Number: 3477 Enrollment: Limited to 10.
Ruth S. Lingford
Half course (spring term). Th., 1-5, and weekly film screenings F., 1-3.
This course offers returning animators a chance to extend and deepen skills and understanding of animation and to make a more substantial piece of work, alongside introductory level students who will learn some basic tools of animation. Additional exercises encourage students to challenge themselves and explore a range of creative possibilities.
Note: Special First Meeting: Tuesday, January 29 at 1pm in Sever 402-405.
Prerequisite: This course welcomes both introductory level and intermediate level students.

[*Visual and Environmental Studies 154br. Animation Workshop: Studio Course]
Catalog Number: 1484 Enrollment: Limited to 10.
Daniel A. Sousa
Half course (fall term). W., 1-5, and weekly film screenings F., 1-3.
This course allows each student to make a short animated film, taking it through all the stages from idea to post-production. Open to beginners and experienced animators.
Note: Expected to be given in 2013–14. The first meeting of this class will be Wednesday, September 1 at 1 pm.

[*Visual and Environmental Studies 157t. Electro-acoustic Music and Video in Dialogue: Studio Course]
Catalog Number: 66277 Enrollment: Limited to 10.
Alfred F. Guzzetti and Hans Tutschku
Half course (fall term). Tu., 10-1, and a weekly lab Th., 10-1.
This course will enable artists and composers to create together. Students will not only work in their own medium, but learn to work in the other: composers will realize video and video artists will compose. Final projects will be presented in concert.
Note: Expected to be given in 2013–14.
Prerequisite: Music 167 or Music 264 or one VES half-course in video production.

*Visual and Environmental Studies 158aar (formerly *Visual and Environmental Studies 158ar). Image, Sound, Culture: Studio Course
Catalog Number: 6680 Enrollment: Limited to 10.
Alfred F. Guzzetti and Mary M. Steedly
Full course (spring term). M., 1-4, W., 1–4 and 6–9 p.m.
Students use video and sound to produce short works about embodied experience, culture, and nature, and are introduced to current issues in aesthetics and ethnography.
Note: No previous studio experience necessary. First Meeting: Monday, January 28 at 1 to 2pm in Sever 416.

*Visual and Environmental Studies 158br (formerly *Visual and Environmental Studies 158r). Living Documentary: Studio Course
Catalog Number: 9385 Enrollment: Limited to 10.
Robb Moss and Mary M. Steedly
**Visual and Environmental Studies 160. Modernization in the Visual United States Environment, 1890-2035**

Catalog Number: 6668 Enrollment: Limited to 20.

John R. Stilgoe


Modernization of the US visual environment as directed by a nobility creating new images and perceptions of such themes as wilderness, flight, privacy, clothing, photography, feminism, status symbolism, and futurist manipulation as illustrated in print-media and other advertising enterprise.

*Note:* Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 4303.

*Prerequisite:* VES 107 or permission of the instructor.

**Visual and Environmental Studies 161r. Media Anthropology: Technology, Technique, Techné: Studio Course**

Catalog Number: 5710 Enrollment: Limited to 10.

Lucien G. Castaing-Taylor

Half course (fall term). M., 10–12.

Students receive hands-on training, in the Lab and in the field, with digital video and audio production and post-production technology. Emphasis is on both mastering the technology and developing a technique consonant with one’s relationship to one’s subject.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* VES 58r or 158r.

**Visual and Environmental Studies 162. Media Archaeology of Place**

Catalog Number: 24452 Enrollment: Limited to 10.

Lucien G. Castaing-Taylor and Ernst Karel

Half course (fall term). Tu., Th., 2–4, and weekly film screenings W., 6–8 pm.

Combining media art practice with critical inquiry and ethnographic research, Boston and other sites serve as laboratories for exploring different modes of representing place. Films, maps, sound recordings, and other media artifacts are treated as archaeological objects and are re-interpreted for exhibition.

*Note:* Expected to be given in 2013–14. An interview with the instructor is required for admission.

*Prerequisite:* At least one VES studio half-course, preferably in film, video or photography.

**Visual and Environmental Studies 163. Soft and Hard: Studio Jean-Luc Godard: Studio Course**

Catalog Number: 9696 Enrollment: Limited to 10.

Amie Siegel

Half course (fall term). W., 10-12 and W., 1-4.
Students explore Godard’s films while producing work as studio artists. We will look at genre, pictorial flatness vs. depth, text and image, camera movement, still images, color, asynchrony, and Brechtian tropes in Godard’s cinema of reversed time, perverse interviews, critical politics, and gender. Participants try out processes of inspiration, derivation, and notation in relation to Godard’s oeuvre to enrich their cinematic vocabulary and investigate filmic practices within their own work (video, film, drawing, sculpture, installation, performance).

Note: Expected to be given in 2013–14.
Prerequisite: At least one VES studio half-course or permission of the instructor.

[*Visual and Environmental Studies 163t. The Art of Forgetting*]
Catalog Number: 63572 Enrollment: Limited to 10.
Carolyn Tribe
Half course (fall term). Tu., Th., 9–12.
A studio course on representing the ephemeral domain of memory and its corollary, forgetting. We will look at strategic reenactments, cinematic re-writes, experimental documentaries and other efforts to stave off amnesia in addition to seeking clues from other disciplines (cognitive science, literature, psychoanalysis). Appropriate for but not limited to students of film studies, visual art and video.

Note: Expected to be given in 2013–14.
Prerequisite: Priority will be given to students who have completed at least one VES studio half-course in photography, film or video, but no previous experience is required.

[*Visual and Environmental Studies 165. Moving Image: Film and Video Installation*]
Catalog Number: 8258 Enrollment: Limited to 10.
Amie Siegel
Where are the boundaries between art gallery and film set, theatrical stage or production studio? All have been appropriated and/or re-staged in installations by contemporary artists. Participants in this studio course, through the creation of their own works, will explore various strategies using cinema, video, and photography as material or metaphor in art. Students will work with materials of 16mm film, slides, film projectors and video projection. We will consider various approaches to video installation, sound and cinematic spectacle with regard to space, staging, production and demands on viewer experience as well as gestures of genre and excess.

Prerequisite: At least one VES studio half-course, preferably in film, video or photography, or permission of the instructor.

[*Visual and Environmental Studies 166. North American Seacoasts and Landscapes, Discovery to Present: Seminar*]
Catalog Number: 5873
John R. Stilgoe
Half course (fall term). Tu., 1–3.
Selected topics in the history of the North American coastal zone, including the seashore as wilderness, as industrial site, as area of recreation, and as artistic subject; the shape of coastal landscape for conflicting uses over time; and the perception of the seashore as marginal zone in literature, photography, film, television, and advertising.

Note: Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as
4304.
Prerequisite: VES 107 and VES 160, or permission of the instructor.

[*Visual and Environmental Studies 167. Adventure and Fantasy Simulation, 1871-2036: Seminar]
Catalog Number: 4902
John R. Stilgoe
Half course (spring term). Tu., 1–3.
Visual constituents of high adventure since the late Victorian era, emphasizing wandering woods, rogues, tomboys, women adventurers, faerie antecedents, halflings, crypto-cartography, Third-Path turning, martial arts, and post-1937 fantasy writing as integrated into contemporary photography, advertising, video, computer-generated simulation, and designed life forms.
Note: Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 4305.
Prerequisite: VES 107, VES 160, and VES 166, or permission of the instructor.

Visual and Environmental Studies 170 (formerly 174c). Film and Photography, Ontology and Art
Catalog Number: 8352
D. N. Rodowick
Half course (spring term). M., 3–5, and weekly film screenings W., 3-5.
A critical survey of the principal authors, concepts, and films in the classical period of film theory. We will study the aesthetic debates of the period in their historical context, whose central questions include: Is film an art? If so, what specific and autonomous means of expression define it as an aesthetic medium? What defines the social force and function of cinema as a mass art?
Note: Weekly readings and discussion will examine major film movements—for example, French Impressionism and Surrealism—as well as the work of key figures such as Hugo Münsterberg, Rudolf Arnheim, Jean Epstein, Germaine Dulac, Béla Balázs, Erwin Panofsky, Siegfried Kracauer, Walter Benjamin, André Bazin and Stanley Cavell.
Prerequisite: VES 70 or permission of the instructor.

[Visual and Environmental Studies 172a (formerly 186c). Film and Photography, Image and Narration]
Catalog Number: 4152
D. N. Rodowick
A survey of debates on photography and film carried out in the contexts of semiotics, structuralism, and narratology from the end of World War II until the early 1980s. In what ways can the image be considered a sign and how do images come to have meaning? Readings will include work by Roland Barthes, Christian Metz, Jean Mitry, Noël Burch, Raymond Bellour, Umberto Eco, Pier Paolo Pasolini, David Bordwell, and Gilles Deleuze.
Note: Expected to be given in 2013–14.
Prerequisite: Literature and Arts B-11 or permission of the instructor.

[Visual and Environmental Studies 172b (formerly 173t). Contemporary Film Theory]
Catalog Number: 9562
D. N. Rodowick

Half course (fall term). W., 1–3.

A critical and historical survey of the major questions, concepts, and trends in film theory since 1968. Weekly readings and discussion will examine how the study of film and spectatorship have been influenced by semiotics, psychoanalysis, Marxism, postmodernism, feminism, and gay and lesbian criticism, as well as multiculturalism.

Note: Expected to be given in 2013–14.

Prerequisite: VES 70 or permission of the instructor.


Catalog Number: 4394

Scott MacDonald (Hamilton College)

Half course (fall term). M., 4–6; Tu., 7–10 p.m.

The history of cinema as representation and interpretation of "reality", focusing on masterworks of nonfiction film and video from a variety of periods and geographic locales that subvert viewers’ conventional expectations and their personal security as a means of expanding and deepening consciousness and contributing to a more fully examined life. The considerable accomplishments and substantial impact of filmmakers working in Cambridge over the past half-century will be a primary focus. Frequent filmmaker guests.

Visual and Environmental Studies 177e. Critical Cinema: A History of Experimental and Avant-Garde Film

Catalog Number: 0898

Scott MacDonald (Hamilton College)

Half course (fall term). M., 7–10 p.m.; Tu., 4–6.

A historical survey of accomplished alternatives to commercial movies, produced by individuals or small groups with limited resources. The considerable range of works to be studied include Dada and Surrealist film, visual music, psychodrama, Queer cinema, structural film, recycled cinema, devotional cinema, cinema of Place, and the digital remake. Regular class screenings and discussions, often of rarely available films, supplemented by visiting filmmakers and curators as part of the Harvard Film Archive fall schedule.

[Visual and Environmental Studies 180. Film, Modernity and Visual Culture]

Catalog Number: 2874

Giuliana Bruno

Half course (fall term). Th., 11:30-1, a weekly film screening W., 7-9, and a weekly section to be arranged.

Cinema has changed the way we see and think. Modern visual culture develops with the art of film. Course considers this major 20th century shift in visual perception. We look at “motion” pictures as a product of modernity, born of scientific motion studies, aesthetic and cultural mobility. We relate film to the moving experience of urban space. Key writings and films engage sites of modern movement: home(land) and city, voyage and transport, gender and body.

Note: Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 4131.
**Visual and Environmental Studies 181. Frames of Mind: Film Theory**
Catalog Number: 0648
*Giuliana Bruno*
Half course (spring term). Th., 11:30-1, a weekly film screening W., 7-9 pm, and weekly sections to be arranged.
How do moving images transform the way we think? Introduction to film theory aimed at interpreting the visual world, and developing skills to analyze films and media images. Survey of classical and contemporary film theory goes from turn-of-the-century scientific motion studies to the virtual movements of today. Considers theories of space, time, and motion, including Eisenstein’s theory of montage and architecture. Treats visual technology and sensate space, the cultural history of the cinematic apparatus, the body and physical existence, affect and gender, and screen theory. Different theoretical positions guide us in understanding and reading films.
*Note:* Offered jointly with the Graduate School of Design as 4132.

[*Visual and Environmental Studies 182. Film Architectures: Seminar*]
Catalog Number: 6864 Enrollment: Limited to 12.
*Giuliana Bruno*
Half course (fall term). W., 2-4, and weekly film screenings Tu., 7-9pm.
What is our experience of architecture in cinema? Considering the relation of these two arts of space, we look at how film and architecture are linked in history on the “screen” of the modern age. Highlighting the interaction of modernity, urban culture and cinema, we explore the architecture of film in relation to the architectures of transit and the culture of travel. Emphasis on readings and case study analysis to pursue research projects and conduct presentations.
*Note:* Expected to be given in 2013–14. Offered jointly with the Graduate School of Design as 4351. Expected to be offered 2012-13.
*Prerequisite:* A course in film studies or the equivalent course in cultural studies.

**Visual and Environmental Studies 183. Cinema and the Auteur - (New Course)**
Catalog Number: 71745
*Tom Conley*
Half course (spring term). Tu., 11:30-1, and weekly film screenings W., 1-3.
Studies development of auteur theory in French film and criticism. Readings include Cahiers du cinéma, Bazin, Deleuze, Godard, and Foucault. Viewings include Renoir, American and Italian auteurs, and post-new wave cinemas.

**Visual and Environmental Studies 184. Imagining the City: Literature, Film, and the Arts**
Catalog Number: 5736
*Giuliana Bruno and Svetlana Boym*
Half course (fall term). Th., 11:30-1, a weekly film screening W., 7-9 pm, and a weekly section to be arranged.
How do visual representation and narrative figuration contribute to construct urban identity? Explores the urban imagination in different art forms: architecture, cinema, literature, photography, and painting. Topics to be mapped out include: cities and modernity, metrophilia and metrophobia, the museum and cultural anthropology, the ruin and construction site, interior space and public sphere, technology and virtual cities. We will focus on the European city, as we travel through Paris, Berlin, St. Petersburg, Moscow, Naples and Rome.
Note: Cannot be taken for credit if Literature 184 has been taken. Cannot be taken concurrently with Literature 184. Also offered jointly with the Graduate School of Design as 4353. This course, when taken for a letter grade, meets the Core area requirement for Literature and Arts B.

Catalog Number: 1575 Enrollment: Limited to 12.
Giuliana Bruno
Half course (spring term). W., 2-4, and a weekly film screening Tu., 7-9 pm.
How do the visual arts engage the sensorium? What is the place of materiality in our virtual world? How do film and fashion communicate as objects of material culture? As powerful image makers, film and fashion share a role with architecture and contemporary art. We explore their common language in "fashioning" sensory experience and material visual expression. Readings in contemporary visual theory and diverse film screenings explore the haptic as part of our cultural "fabric". Extensive textual analysis of Wong Kar-wai’s In the Mood For Love.
Note: Offered jointly with the Graduate School of Design as 4354.
Prerequisite: A course in film studies or the equivalent course in cultural studies.

Visual and Environmental Studies 188c. Korea Reborn: Postwar Korea As Seen Through Film: Seminar - (New Course)
Catalog Number: 34766
David Chung
Half course (spring term). Tu., 3–5, with a weekly screening M., 7–9 p.m. EXAM GROUP: 17, 18
As Korea emerged from the Korean War, artists, writers, and film directors began to address the effects of the nation’s recovery and rapid modernization. Through periods of dictatorship and democracy, Korean filmmakers produced memorable and powerful narratives. Through weekly screenings of films and classroom discussions, this course will examine the cultural ramifications of Korea’s social, economic, and political shifts since the mid-twentieth century and their legacy on contemporary society as seen through film.

[Visual and Environmental Studies 188s. Soviet and Russian Film and Film Theory]
Catalog Number: 47703
D. N. Rodowick and Justin Weir
Half course (fall term). M., 1-3, and a weekly film screening W., 4-6.
A critical and historical survey of the major issues and trends in Soviet film theory and aesthetics from the time of the 1917 revolution through the end of WWII. Weekly readings and discussion will examine the major directors--Lev Kuleshov, Vselovod Pudovkin, Dziga Vertov, Sergei Eisenstein, and Andrei Tarkovsky--through their films and writings as well as the film theories of important critics such as Boris Eikhenbaum and Jurij Lotman.
Note: Expected to be given in 2013–14.

[Visual and Environmental Studies 189. Exploring Culture Through Film]
Catalog Number: 9619
Lucien G. Castaing-Taylor
Half course (fall term). Tu., 1-4.
Introduction to the history and theory of documentary and ethnographic film. A wide variety of works from 1895 to today will be screened and discussed. Different cinematic styles which have been used to depict human existence and the relationships between individuals and the wider cultural and political contexts of their lives will be compared.

*Note:* Expected to be given in 2013–14.

[*Visual and Environmental Studies 190n. French New Wave Cinema*]
Catalog Number: 9358 Enrollment: Limited to 15.
**Instructor to be determined**
*Half course (spring term). Th., 1–3.*
This course is meant to help situate French New Wave cinema historically, both generally within the contexts of French social and political attitudes, and more specifically, within the realms of film history and theory. Structuring our analysis around the question, "What was so new about the French New Wave?" this course explores the ways in which the movement both broke from established filmic conventions, and importantly, participated within them.

*Note:* Expected to be given in 2013–14.

**Prerequisite:** No knowledge of French required; readings, films and discussions in English.

**Visual and Environmental Studies 191e. The Essay Film - (New Course)**
Catalog Number: 41531
**Dominique Bluher**
*Half course (spring term). Tu. 1-3 with a weekly film screening Tu. 3-6.*
Since the 1960s the essay film has emerged as one of the most inventive nonfiction forms. What makes a film "essayistic"? How does it explore the intersection between the objective and the subjective, the factual and the personal, memory and the present? Does the film essay present affinities with the literary personal essay? To explore these and other questions, we will investigate the work of film essayists such as Chris Marker, Jean-Luc Godard, Harun Farocki, Agnès Varda, Ross McElwee.

[Visual and Environmental Studies 192 (formerly Foreign Cultures 21). Cinema and French Culture from 1896 to the Present ]
Catalog Number: 8550
**Tom Conley**
*Half course (spring term). M., 1-3, and a weekly film screening W., 7-9. EXAM GROUP: 6, 7*
Focuses on relations of cinema to French culture from the silent era to the age of video. Explores film in dialogue with cultural and historical events, development of a national style and signature, a history of criticism. Correlates study of cinema to cultural analysis. Takes up Renoir and poetic realism, unrest in 1930s, France and other filmic idioms (Italy, Hollywood, Russia), new wave directors, feminist and minoritarian cinema after 1980.

*Note:* Expected to be given in 2013–14. This course, when taken for a letter grade, meets the Core area requirement for either Foreign Cultures or Literature and Arts B, but not both.

[Visual and Environmental Studies 194w. World Cinema Today]
Catalog Number: 4865
**Dominique Bluher**
*Half course (spring term). Tu., 1-3, and a weekly film screening Tu., 3-6.*
An in-depth study of works by some of contemporary world cinema’s most significant filmmakers in pertinent artistic, historical, and theoretical contexts. Provides close consideration of representative features by Wong Kar-Wai, Hayao Miyazaki, Abbas Kiarostami, Agnès Varda, David Cronenberg, Hou Hsiao-hsien, Jim Jarmusch, and others.

*Note:* Expected to be given in 2013–14. No background in film studies necessary.


Catalog Number: 59802 Enrollment: Limited to 15.

Haden R. Guest  
*Half course (spring term). W. 10-12 with a weekly film screening M. 1-3.*

This course examines the "Golden Age" of American cinema as an industry and art by looking closely at the system of motion picture production companies, or studios, that flourished in Southern California from the early 1920s and through the 1950s. Using a diverse range of primary documents and period films to explore the different stages and roles of industrialized filmmaking, this class will study and debate the emergence and legacy of a "classical" Hollywood style.

*Note:* First Meeting: Wednesday, January 30 at 10am in Carpenter Center Lecture Hall.

**Visual and Environmental Studies 196. Women’s Film and Video in France: Agnès Varda, Chantal Akerman and Claire Denis**

Catalog Number: 9812

Dominique Bluher  
*Half course (fall term). Hours to be arranged.*

Agnès Varda, Chantal Akerman and Claire Denis are undoubtedly three of the most significant contemporary film directors working in France today. Having started making films in the 1960s, 1970s and 1980s, respectively, this class examines some of their landmark works in historical, cinematic and theoretical contexts.

*Note:* Expected to be given in 2013–14. No knowledge of French required. Readings, films and discussions in English. Previous coursework in Film Studies or related fields helpful, but not required.

**Related Courses of Interest for VES Concentrators**

[Aesthetic and Interpretive Understanding 14 (formerly Literature and Arts C-56). Putting Modernism Together]

[Aesthetic and Interpretive Understanding 16. Openings: The Illuminated Manuscript]

[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]

[Aesthetic and Interpretive Understanding 36 (formerly Foreign Cultures 94). Buddhism and Japanese Culture]

[Aesthetic and Interpretive Understanding 40. Monuments of Islamic Architecture]

[Aesthetic and Interpretive Understanding 44. Arts of Asia]

[Aesthetic and Interpretive Understanding 53 (formerly Japanese Literature 161). Anime as Global Popular Culture]

[African and African American Studies 102. The Hip Hop Generation and Post-Civil]
Rights Black Politics

Anthropology 1756. The Horror of Anthropology
[*Anthropology 1986. Art, Anthropology, and Aesthetics]

[Culture and Belief 28. Hindu Worlds of Art and Culture]

Culture and Belief 30. Seeing is Believing: A History of Photography

Culture and Belief 54 (formerly Foreign Cultures 76). Nazi Cinema: The Art and Politics of Illusion

*Dramatic Arts 135. Design for the Theatre: History and Practice

*Dramatic Arts 136. Designing for the Stage

[Empirical and Mathematical Reasoning 19 (formerly Quantitative Reasoning 46). The Art of Numbers]

[*History 88b. Medieval History and Cinema]

History of Art and Architecture 171p. From Mother Earth to Planet Mars: Designed Landscapes, 1850-2013 - (New Course)

[*History of Science 152. Filming Science]

Literature 129. Reading the 18th Century Through 21st-Century Eyes

[*Literature 131. The Arab-American Experience in Fiction, Film, and Popular Culture - (New Course)]


Music 263r. Intimate Sound Installations - (New Course)

Romance Studies 111. The World of Romance Language Cinemas: A Classical Age - (New Course)

Scandinavian 115. Nordic Cinema

[*Science of the Physical Universe 24. Introduction to Technology and Society]

[Slavic 143. Russian Formalism]

[Slavic 148. Strange Russian Writers]

[Slavic 178 (formerly Literature 178). Trauma and Postmemory: Collective Identity and Unexperienced Loss: Conference Course]

Societies of the World 33 (formerly Foreign Cultures 84). Tokyo

Societies of the World 38. Pyramid Schemes: The Archaeological History of Ancient Egypt

*Studies of Women, Gender, and Sexuality 1210ft. Theories Of Representation

Studies of Women, Gender, and Sexuality 1245. Virgins, Vamps, and Camp: Gender and Sexuality in Classical Hollywood Cinema


United States in the World 29 (formerly Literature and Arts B-20). Designing the American City: Civic Aspirations and Urban Form

*Primarily for Graduates

*Visual and Environmental Studies 270. Proseminar in Film and Visual Studies: History

Catalog Number: 1741
Laura A. Frahm

Half course (spring term). Th., 1-3, and a weekly film screening W., 4-6.

Considers film history and the relations between film and history as well as pertinent theoretical
approaches to historiography. Critical readings of exemplary film historical studies and careful scrutiny of films both in and as history.

*Note:* Required of all Film and Visual Studies graduate students, as well as graduate students intending to declare a secondary field in Film and Visual Studies.

**Visual and Environmental Studies 271. Proseminar in Film and Visual Studies: Theory**

Catalog Number: 0159

D. N. Rodowick

*Half course (fall term). M., 1-3.*

An advanced survey of current debates on the place of the moving image in contemporary visual culture and art practice with respect to concepts of space, time, movement, and affect.

*Note:* Required of all Film and Visual Studies graduate students as well as graduate students intending to declare a secondary field in Film and Visual Studies.

[*Visual and Environmental Studies 275a (formerly Visual and Environmental Studies 175a). Framing the I: Autobiography and Film]*

Catalog Number: 3084 Enrollment: Limited to 12. Open to undergraduates with instructor’s permission.

Dominique Bluher

*Half course (spring term). Th., 11:30–1, and a weekly film screening Tu., 7-9 pm.*

This course explores the forms of self-representation in film and video in the framework of modern philosophical, psychoanalytical, and socio-cultural conceptions of the self, as well as recent theoretical and artistic developments in the visual arts and literature.

*Note:* Expected to be given in 2013–14.

*Prerequisite:* A course in Film Studies or equivalent course in related fields.

**Visual and Environmental Studies 283. Screens: Media Archaeology and Visual Arts Seminar**

Catalog Number: 74909 Enrollment: Limited to 12.

Giuliana Bruno

*Half course (fall term). W., 2–4.*

How do screens function as interface between us and the world? What is the role of the screen in contemporary visual arts and media culture? The art of projection has traveled from film exhibition to art installation. With the interdisciplinary approach of visual studies, we examine the history and archaeology of screen media, their cultural and aesthetic dimensions, from pre-cinematic exhibition to the post-medium condition. Considering the art of screening in the deep time of media, we explore the changing architecture of screen space, at the crossroads of science and art, museum and moving images.

*Note:* Offered jointly with the Graduate School of Design as 4356.

**Visual and Environmental Studies 287. Cinema and Nation - (New Course)**

Catalog Number: 33084

Eric Rentschler

*Half course (spring term). Tu., 2-4, with a weekly film screening F., 2-5.*

This course addresses the role of modern media in the formation of local and global identities. In
that endeavor we will consider exemplary films from a number of nations as well as pertinent historical and theoretical texts.

[*Visual and Environmental Studies 292r. Philosophy and Film: Gilles Deleuze and Stanley Cavell*]
Catalog Number: 5659 Enrollment: Limited to 12. Open to undergraduates with instructor’s permission.
D. N. Rodowick
*Half course (spring term).* M., 1–3.
Gilles Deleuze and Stanley Cavell are two contemporary philosophers with distinctly original conceptions of the specificity of philosophy and of philosophical expression in relation to film. Through key texts and related screenings, in this seminar we will read these two philosophers together to deepen and clarify their original contributions to our understanding of film and of contemporary philosophical problems of ontology and ethics, and interpretation and evaluation.
*Note:* Expected to be given in 2013–14.

**Graduate Courses of Reading and Research**

*Visual and Environmental Studies 301. Film and Visual Studies Workshop*
Catalog Number: 2867
*Eric Rentschler* 2325

*Visual and Environmental Studies 310. Reading and Research*
Catalog Number: 5851
*Members of the Department*
*Note:* Conducted through regular conferences and assigned writing. Limited to students reading specifically on topics not covered in regular courses. Open only by petition to the Department; petitions should be presented during the term preceding enrollment, and must be signed by the instructor with whom the reading is to be done. All applicants for admission should first confer with the Director of Graduate Studies.

*Visual and Environmental Studies 320. Directed Study*
Catalog Number: 0441
*Members of the Department*

[*Visual and Environmental Studies 350hf. Critical Media Practice: Non Fiction Filmmaking Workshop*]
Catalog Number: 85749 Enrollment: Limited to 10.
*Lucien G. Castaing-Taylor*
*Half course (throughout the year).* Tu., 6–9 p.m. EXAM GROUP: 18
A graduate workshop for Film Study Center non-fiction film and video projects.
*Note:* Expected to be given in 2013–14.

**Related Courses of Interest for Film and Visual Studies Graduate Program**
Anthropology 1756. The Horror of Anthropology
*Anthropology 1836aar (formerly *Anthropology 2835r). Sensory Ethnography I
*Anthropology 1836br (formerly *Anthropology 2836r). Sensory Ethnography II: Studio Course
Anthropology 2688. The Frankfurt School, Film, and Popular Culture
[History of Art and Architecture 277s. Circa 1970]
[History of Art and Architecture 277z. 1960’s Technical Reproductions: Prints, Photos, Books]
Music 263r. Intimate Sound Installations - (New Course)
[Romance Studies 219. Digital Humanities 2.0: a metaLAB(at)Harvard seminar]
*Visual and Environmental Studies 270. Proseminar in Film and Visual Studies: History
*Visual and Environmental Studies 271. Proseminar in Film and Visual Studies: Theory
[*Visual and Environmental Studies 292r. Philosophy and Film: Gilles Deleuze and Stanley Cavell]
*Visual and Environmental Studies 301. Film and Visual Studies Workshop
*Visual and Environmental Studies 310. Reading and Research
*Visual and Environmental Studies 320. Directed Study
[*Visual and Environmental Studies 350hf. Critical Media Practice: Non Fiction Filmmaking Workshop]

Women, Gender, and Sexuality

AN HISTORICAL EDITION OF FAS COURSES OF INSTRUCTION

Faculty of the Committee on Degrees in Studies of Women, Gender, and Sexuality

Afshaneh Najmabadi, Francis Lee Higginson Professor of History and Professor of the Studies of Women, Gender, and Sexuality (Chair)
Robin M. Bernstein, Associate Professor of African and African American Studies and of Studies of Women, Gender, and Sexuality
Michael Bronski, Professor of the Practice in Media and Activism
Peter J. Burgard, Professor of German (on leave spring term)
Glenda R. Carpio, Professor of English and of African and African American Studies
Nancy F. Cott, Jonathan Trumbull Professor of American History (on leave 2012-13)
Rachel L. Greenblatt, Associate Professor of Near Eastern Languages and Civilizations
Helen Hardacre, Reischauer Institute Professor of Japanese Religions and Society
Alice Jardine, Professor of Romance Languages and Literatures and of Studies of Women,
Gender, and Sexuality
Ewa Lajer-Burcharth, William Dorr Boardman Professor of Fine Arts
Caroline Light, Lecturer on Studies of Women, Gender, and Sexuality (Director of Studies)
Marcyliena Morgan, Professor of African and African American Studies
Katharine Park, Samuel Zemurray, Jr. and Doris Zemurray Stone Radcliffe Professor of the History of Science (on leave 2012-13)
Ahmed Ragab, Richard T. Watson Assistant Professor of Science and Religion (Divinity School)
Sindhumathi Revuluri, Associate Professor of Music (on leave 2012-13)
Sarah S. Richardson, Assistant Professor of the History of Science and of Studies of Women, Gender, and Sexuality (on leave 2012-13)
Oliver Simons, Associate Professor of Germanic Languages and Literatures (on leave fall term)
Kimberly Theidon, John L. Loeb Associate Professor of the Social Sciences
Laurel Thatcher Ulrich, 300th Anniversary University Professor
Jocelyn Viterna, Associate Professor of Sociology
Adelheid Voskuhl, Associate Professor of the History of Science (on leave 2012-13)
Tomiko Yoda, Takashima Professor of Japanese Humanities

Other Faculty Offering Instruction in Studies of Women, Gender, and Sexuality

Henry Abelove, F. O. Matthiessen Visiting Professor of Studies of Women, Gender, and Sexuality
Chiwen Bao, Lecturer on Social Studies
Karen P. Flood, Lecturer on Studies of Women, Gender, and Sexuality
Erin R. Helfrich, Lecturer on Studies of Women, Gender, and Sexuality
Keridwen Luis, College Fellow in Studies of Women, Gender, and Sexuality
Maria San Filippo, Lecturer on Studies of Women, Gender, and Sexuality
Linda Schlossberg, Lecturer on Studies of Women, Gender, and Sexuality
Juliet Schor, Visiting Professor of Studies of Women, Gender, and Sexuality
Katherine Stanton, Lecturer on Studies of Women, Gender, and Sexuality

Affiliated Members

Dominique Bluher, Lecturer on Visual and Environmental Studies
Verena A. Conley, Visiting Professor of Comparative Literature and of Romance Languages and Literatures

Primarily for Undergraduates

*Studies of Women, Gender, and Sexuality 91r. Supervised Reading and Research
Catalog Number: 6225
Director of Studies and staff
Half course (fall term; repeated spring term). Hours to be arranged.
The study of selected topics in studies of women, gender, and sexuality.

*Studies of Women, Gender, and Sexuality 97. Tutorial-Sophomore Year
Catalog Number: 7217 Enrollment: Limited to concentrators.
Robin M. Bernstein

**Half course (spring term). Tu., 1–3. EXAM GROUP: 15, 16**

An introduction to foundational concepts and analytical tools in the study of gender and sexuality. Focus on the ways in which diverse people have understood gender, sexuality, race, and nationhood as categories of knowledge. Case studies of activists and theorists forging complex alliances across unstable differences. Readings include Gloria Anzaldúa, Adrienne Rich, Simone de Beauvoir, Chandra Talpade Mohanty, Donna Haraway, Patricia Hill Collins, Inderpal Grewal, Judith Butler, Monique Wittig, Alison Bechdel, and Michel Foucault.

*Note:* Required of, and limited to, Women, Gender, and Sexuality concentrators in their first year in the concentration.

*Studies of Women, Gender, and Sexuality 98r. Tutorial - Junior Year: Research and Methods*

Catalog Number: 8094

Afsaneh Najmabadi

**Half course (spring term). M., 2:30 to 4:30.**

Required for Honors concentrators, this seminar gives students in-depth exposure to interdisciplinary feminist methodologies as they develop their own research projects. The common weekly seminar is organized around a single topic, and students will consider how the topic has been approached in the humanities, the social sciences, and the natural sciences. Weekly seminar meetings provide a collaborative space for students to develop their own research agenda, which culminates in a 25-30-page paper.

*Note:* Required of all Honors concentrators in their junior year.

*Studies of Women, Gender, and Sexuality 99a. Tutorial — Senior Year*

Catalog Number: 6763

Linda Schlossberg

**Half course (fall term; repeated spring term). Hours to be arranged.**

*Note:* Both WGS 99a and 99b are required of all honors concentrators in their senior year.

*Studies of Women, Gender, and Sexuality 99b. Tutorial — Senior Year*

Catalog Number: 5847

Linda Schlossberg

**Half course (fall term; repeated spring term). Hours to be arranged.**

*Note:* Both WGS 99a and 99b are required of all honors concentrators in their senior year.

**For Undergraduates and Graduates**

*Studies of Women, Gender, and Sexuality 1127. Beyond the Sound Bite: Women, Gender, and Sexuality in The Daily News - (New Course)*

Catalog Number: 48191 Enrollment: Limited to 35.

Alice Jardine

**Half course (fall term). Tu., Th., at 10 and a one hour section to be arranged. EXAM GROUP: 12**

We are bombarded by sound bites from all over the globe, moving at disorienting speeds, reorganizing our relationship to time and space with increasingly dystopic results. This course
will focus on selected televisual and digital events in "real time" from September-December 2012. We will analyze the embedded bits of gender and sexuality always at work in the representations of those events. Topics include: politics, the environment, military adventures, and popular revolt in dialogue with important texts in WGS Studies.

**Studies of Women, Gender, and Sexuality 1168. Education, Race, and Gender in the United States**  
Catalog Number: 72986  
Chiwen Bao  
*Half course (spring term). M., W., at 12 and a one hour section to be arranged. EXAM GROUP: 5*  

Education in the United States often appears as democratizing and a means of upward mobility, an idea complicated by issues of race, gender, class, and sexuality, all of which shape students’ and teachers’ experiences. This class examines theoretical and empirical studies on various schooling spaces and practices and explores how intersecting constructs of identity — such as girl, boy, black, Latino/a, Asian, white — become meaningful in schools and bear implications for individuals and society.  
*Note:* This course, when taken for a letter grade, meets the Core area requirement for Social Analysis.

[*Studies of Women, Gender, and Sexuality 1200fh. Our Mothers, Ourselves: Postwar American Feminist Thought*]  
Catalog Number: 3042 Enrollment: Limited to 30.  
Alice Jardine  
*Half course (fall term). Hours to be arranged.*  
The classics of American postwar, mainstream feminist thought are sometimes assumed, sometimes reviled, but rarely re-read. In this seminar, we will read critically across four decades of widely-read, influential feminist books, keeping constantly in view the philosophical and political, psychological and historical, legal and ethical questions at the heart of women, gender, and sexuality studies today.

**Studies of Women, Gender, and Sexuality 1200hw. Home/Work: Women and Work in the U.S. - (New Course)**  
Catalog Number: 43076 Enrollment: Limited to 30.  
Elizabeth Singer More  
*Half course (spring term). M., W., at 11. EXAM GROUP: 4*  

Women have always worked. But the content and conditions of their work changed drastically over American history, moving from farmhouses, plantations, and family workshops to factories, offices, and private homes in cities or suburbs. This course explores the causes and consequences - social, cultural, political, and economic - of this transformation.

**Studies of Women, Gender, and Sexuality 1200sh. Power to the People: Black Power, Radical Feminism, and Gay Liberation 1955-1975**  
Catalog Number: 9095  
Michael Bronski  
*Half course (fall term). M., 1–3; . EXAM GROUP: 6, 7*
An introduction to the radical American social change movements of the 1960s and 70s. We will examine the specific historical conditions that allowed each of these movements to develop, the interconnections and contradictions among them, and why they ultimately lost political power. Along with historical analysis, we will examine primary source materials, manifestos, autobiographies, and media coverage from the period, as well as relevant films, music, and fiction. The class will be a mixture of lecture and discussion.

**Studies of Women, Gender, and Sexuality 1210ft. Theories Of Representation**
Catalog Number: 5590
Maria San Filippo and members of the Committee
Half course (spring term). Tu., 3 to 5 and weekly section. EXAM GROUP: 17, 18
This course explores visual media’s power to shape, challenge, and transgress gender roles and sexual norms. Course materials, drawn from photography, film, television, and digital media, will address the body, gender politics, intimate relationships, and erotic desire through the lens of feminist, queer, and critical race theory discourses. As we explore how these transgressions are accomplished representationally and ideologically, we will assess visual media’s potential to provoke new ways of thinking about gender and sexuality.

[Studies of Women, Gender, and Sexuality 1210qt (formerly Studies of Women, Gender, and Sexuality 1003). Queer Theory]
Catalog Number: 9232 Enrollment: Limited to 15.

Half course (spring term). Hours to be arranged.
Examines the possibilities and pitfalls of a specifically "queer" understanding of gender, sexuality, culture, history, and politics. Special attention will be given to the international sweep and limits of queerness as conceptual category and identity (and anti-identity) formation in relation to questions of race, ethnicity, nationality, and class as well as artistic production and activism. Works by Butler, Sedgwick, Foucault, Rubin, Halperin, Warner, Wittig, Bersani, Cohen, Lorde, Halberstam, Califia, Stryker, Quiroga, Najmabadi, and many others.
Note: Expected to be given in 2013–14.

[Studies of Women, Gender, and Sexuality 1233. Gender, Sexual Violence, and Empire]
Catalog Number: 4121 Enrollment: Limited to 15.
Katherine Stanton
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
Making the case for what Deepika Bahri identifies as the "prominent and constitutive" role of gender-and sexuality-in colonial formations, this course will examine how gendered and sexed ideas and practices were critical to signifying racial difference, naturalizing exploitation, symbolizing the colonial mission, and managing colonial economies. We will ask, with Ann Laura Stoler, was sexual domination a metaphor for colonial power, or the very "substance" of imperial policy?
Note: Expected to be given in 2013–14.

[Studies of Women, Gender, and Sexuality 1234. A Voice of One’s Own: Creative Writing in Women, Gender, and Sexuality - (New Course)]
Catalog Number: 12567 Enrollment: Limited to 12.
Linda Schlossberg
Half course (spring term). W., 1–3. EXAM GROUP: 6, 7
This creative writing course asks: How does one balance the demands of "politics" with the subtleties of "artistry?" We’ll study short stories in order to figure out how the genre works in terms of pacing, characterization, rhythm, dialogue, and setting, along with secondary readings by authors such as Audre Lorde, Dorothy Allison, and Adrienne Rich that illuminate the ways in which issues of power, agency, and voice have emerged as key themes in feminist writing.

*Studies of Women, Gender, and Sexuality 1236. Gender and the Postcolonial Novel - (New Course)*
Catalog Number: 53601 Enrollment: Limited to 15.
Katherine Stanton
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
Deepika Bahri describes a meaningful transnational literary as one that reads literature "by and about 'Third-World' women as more than informal sociology." This seminar will take up this challenge, reading postcolonial novels about women, gender, and sexuality as rich aesthetic works that are, to echo Edward Said, complexly affiliated with the world. Novels by Dangarembga, Desai, and Hagedorn will illuminate connections between patriarchy and colonialism, feminism and the imperial mission, and gender, race, and poverty.

[*Studies of Women, Gender, and Sexuality 1238. Consuming Passions]*
Catalog Number: 5605 Enrollment: Limited to 15.
Caroline Light
Half course (fall term). Hours to be arranged.
Course explores how sexuality and desire frame experiences of consumption historically, and how unequal distributions of global power influence the relationship between producers of globally marketed goods and services and those who consume them. Topics include sex tourism, migrant domestic labor, international adoption and surrogacy, and the commercialization of same-sex desire.
*Note: Expected to be given in 2013–14.*

Studies of Women, Gender, and Sexuality 1245. Virgins, Vamps, and Camp: Gender and Sexuality in Classical Hollywood Cinema
Catalog Number: 26366
Maria San Filippo
Half course (fall term). Tu., 1–3; M., 8–10 p.m.; . EXAM GROUP: 15, 16
From the 1930s-1960s, the Hollywood studio system dominated cinema worldwide and with it images of sex, gender, and sexuality. Through critical analysis of classics such as Gilda, Gentlemen Prefer Blondes, It Happened One Night, Mildred Pierce, Pillow Talk, and Vertigo, we will investigate Hollywood’s role in constructing, negotiating, and occasionally transgressing norms of identity, behavior, and desire. Taught from a cinema/cultural studies perspective, and incorporating topics and texts integral to feminist and queer film theory.
*Note: Lecture Tuesdays, 1-3. Film screenings Mondays, 8-10.*

Studies of Women, Gender, and Sexuality 1258. Friends with Benefits?
Catalog Number: 12001
Afksaneh Najmabadi
Half course (fall term). Th., Tu., at 12 and a one hour section to be arranged. EXAM GROUP: 14
This course begins with a discussion of popular media productions, such as Friends and Sex and the City, in which friendships and sexual relationships are configured through each other. What does that tell us about meanings of friendship and sex, and their inter-relationship, in contemporary American culture? Readings will include Plato, Biblical sources, Montaigne, Bray, Marcus, Sedgwick, Foucault. We end by asking what gay marriage, Facebook, and changing conceptions of masculinity/femininity are doing to/for friendship.
Note: This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Literature and Arts C. This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief.

*Studies of Women, Gender, and Sexuality 1263. Sexuality and Intimacy in British Literature, 1680-1815 - (New Course)*
Catalog Number: 36248 Enrollment: Limited to 30.
Henry Abelove
Half course (fall term). M., W., at 12, and a one hour section to be arranged. EXAM GROUP: 5
Desire, same-sex sexual practice, cross-sex sexual practice, sexual ethics, gender, marriage, friendship, libertinism, and love, in writings by the Earl of Rochester, David Hume, Alexander Pope, Jonathan Swift, Mary Leapor, John Cleland, Martha Fowke, Samuel Johnson, James Boswell, and Jane Austen.

*Studies of Women, Gender, and Sexuality 1266. Gender and Sports*
Catalog Number: 60105 Enrollment: Limited to 15.
Laura K. Johnson
Half course (spring term). F., 11–1. EXAM GROUP: 4, 5
This course explores the relationship between gender and sports in the U.S. We will consider the ways in which deeply held beliefs about masculinity and femininity, as well as sexuality and race, affect the practice of sports, as well as how sports shape identity. While we will situate our exploration within its historical context, our focus will be on the contemporary scene, including youth, collegiate, and professional sports.
Note: Expected to be given in 2013–14.

*Studies of Women, Gender, and Sexuality 1322. Theory Makes Practice Makes Theory: Feminist Fieldwork and Activity Based Learning*
Catalog Number: 3232 Enrollment: Limited to 12.
Keridwen Luis
Half course (spring term). W., 3–5. EXAM GROUP: 8, 9
This course brings service work and community advocacy together with critical thinking about the complex intersection between feminist "theory" and "practice." Although we are accustomed to thinking of theory as something which is applied to practice, doesn’t practice also influence or build theory? What is the role of academics in advocacy, community initiatives, politics, and other forms of cultural change? Participants will perform volunteer community service work and/or fieldwork in a pre-approved setting, and classroom discussions and readings will focus on feminist, queer, and intersectional analyses.
2012-2013 Previous Courses of Instruction

*Note:* Interested students are strongly encouraged to attend an information session in December detailing the requirements for the course (contact Professor Luis for meeting details). Student enrollment in this course is contingent upon placement at one of the approved internship sites. The placement process will begin during the first week of the course. Students will be required to spend 6 hours per week in an agency or organization, in addition to the weekly 2-hour seminar class.

[*Studies of Women, Gender, and Sexuality 1409. Transexuality, Transgenderism, and the Rest*]
Catalog Number: 3822 Enrollment: Limited to 15.
Afsaneh Najmabadi
Half course (spring term). Tu., 2–4. EXAM GROUP: 16, 17
This course will cover narrative, anthropological, historical, scientific, and theoretical texts (including films) about transexuality and transgenderism. The course will begin with transexuality before and beyond identity politics and its transformation in the light/shadow of identity politics and theories of gender; it will consider these issues initially in a Euro-American context, but also move onto other socio-cultural formations and consider how trans-subjectivities as well as histories and politics of transexuality and transgenderism have been formed transnationally.

*Note:* Expected to be given in 2013–14. Please see syllabus for prerequisite reading. Permission of instructor required.

[*Studies of Women, Gender, and Sexuality 1411. Sex, Gender Roles, and Sexuality in Native America*]
Catalog Number: 57498 Enrollment: Limited to 15.
Keridwen Luis
Half course (fall term). W., 3–5. EXAM GROUP: 8, 9
This course examines issues of gender, sex, and sexuality in various Native American cultures in a historical, anthropological, and political context, using a variety of scholarly, fictional, and personal texts. We will explore sex roles, marriage and the family, and gender variant identities, as well as the massive impact of colonialization and racism on gendered understandings in present-day American cultures.

[*Studies of Women, Gender, and Sexuality 1421. Medical Management of the Female Body*]
Catalog Number: 21083 Enrollment: Limited to 15.
Sarah S. Richardson
Half course (spring term). Th., 1-3, and a one-hour section to be arranged.
This course examines how Western medical knowledge, practices, and institutions define female health and normality and manage diseased and gender-variant female bodies. How, for instance, does medicine conceive of the female body as a medical problem or mystery and how do race, class, and sexuality inflect these conceptions? Topics include: “female maladies,” medicalization of childbirth and the pregnant body, medical management of transgender and intersexed bodies, ideals of fitness, cosmetic surgery, disability, and pharmaceutical marketing.

*Note:* Expected to be given in 2013–14.
*Studies of Women, Gender, and Sexuality 1424. American Fetish: Consumer Culture Encounters the Other - (New Course)*
Catalog Number: 91598 Enrollment: Limited to 15.
Caroline Light
*Half course (fall term). W., 1–3*. EXAM GROUP: 6, 7
How are notions of human difference, including ethnicity, race, gender, and sexuality, used to sell products in an increasingly global market? We will start in the nineteenth century with the rise of consumer culture, examining how cultures and people considered "primitive" achieved value as objects for exchange and entertainment, and then investigate how this idea takes shape in our contemporary moment. Topics include: sex tourism; commodification of "queer" and multiracial aesthetics; "compassionate" consumption.
*Note:* This course, when taken for a letter grade, meets the General Education requirement for Culture and Belief or the Core area requirement for Literature and Arts C.

[*Studies of Women, Gender, and Sexuality 1433. Topics in Advanced Performance Studies: Gender and Sexuality]*
Catalog Number: 42391 Enrollment: Limited to 15.
Robin M. Bernstein
*Half course (fall term). W., 1–3*. EXAM GROUP: 6, 7
In this seminar, we will listen to and participate in current conversations in Performance Studies about gender and sexuality, especially as both these categories intersect with race. Topics include affect, time, and material culture; reading includes works by Eve Kosofsky Sedgwick, E. Patrick Johnson, Judith Halberstam, José Esteban Muñoz, Heather Love, Elizabeth Freeman, Susan Leigh Foster, and Lawrence La Fountain-Stokes. This is an advanced course intended for graduate students and upper-level undergraduates.
*Note:* Expected to be given in 2013–14.
*Prerequisite:* Prerequisite for undergraduates: "Gender and Performance" (General Education/Aesthetic and Interpretive Understanding 26), WGS sophomore tutorial, or permission of the instructor.

*Studies of Women, Gender, and Sexuality 1459. History of Sexuality: Theory and Practice - (New Course)*
Catalog Number: 51355 Enrollment: Limited to 15.
Henry Abelove
*Half course (fall term). Tu., 2–4*. EXAM GROUP: 16, 17
Our goal will be to consider how historical work on topics such as sexuality, friendship, intimacy, sociability, and marriage may be improved and advanced. Writings by anthropologists, Gayle Rubin, David Valentine, Elizabeth Povinelli; by literary critics, Eve Kosofsky Sedgwick, Michael Warner, Leo Bersani; by philosophers, Michel Foucault, Judith Butler, Michel de Certeau; and by historians, Matt Houlbrook, Joan Wallach Scott, Alan Bray.

Studies of Women, Gender, and Sexuality 1464. Gender and Consumer Culture - (New Course)
Catalog Number: 55183
Juliet Schor
*Half course (spring term). Tu., 1–3; possible one-hour section to be arranged*. EXAM GROUP:
Consumer culture has been a catalyst for changing gender behaviors, new divisions of labor between market and household, and conflicts about gender roles. We consider three periods: the emergence of consumer society in late 19th/early 20th century; post-World War II suburban growth, advertising and media; and the 21st century backlash against/global spread of consumer culture. Readings focus on the intersection of consumer culture and gender, with attention to theoretical issues and contemporary dynamics of consumerism.

*Studies of Women, Gender, and Sexuality 1466. Virtue, Vice and Everyday Life - (New Course)*
Catalog Number: 79196 Enrollment: Limited to 15.
Erin R. Helfrich
Half course (spring term). M., 1–3. EXAM GROUP: 6, 7
This seminar will explore the areas of overlap and also of disconnect between our conscious decisions, our unconscious reactions, and our moral values. We will focus specifically on the ways that our moral, social, and psychological environments give rise to ethical challenges relating to gender. Topics may include: workforce discrimination; women’s participation in STEM fields and representation in governing bodies; how work is coded masculine or feminine; and women and welfare.

*Studies of Women, Gender, and Sexuality 1500. The Senior Capstone*
Catalog Number: 72605 Enrollment: Limited to 12.
Karen P. Flood
Half course (spring term). Th., 1–3. EXAM GROUP: 15, 16
This course allows advanced students to synthesize previous semesters of study in WGS in an intensive research-oriented seminar. Students will complete independent projects while also building collective knowledge around a topic in gender and sexuality studies. The likely focus for 2012 is sex, gender and work. Possible areas of study include the sex-typing of occupations, care work, gender and LGBT discrimination and harassment in the workplace, sex work, labor activism, and the politics of welfare.

Note: Intended for WGS seniors on capstone track, but open by permission of instructor to other advanced students with experience in women, gender, and sexuality studies.

Primarily for Graduates

*Studies of Women, Gender, and Sexuality 2000. Introduction to WGS: Graduate Proseminar*
Catalog Number: 9620 Enrollment: Limited to 15.
Alice Jardine
Half course (spring term). Tu., Th., at 12. EXAM GROUP: 14
An overview of major questions raised by the interdisciplinary study of women, gender, and sexuality and the challenges thus raised to traditional divisions of knowledge. We will privilege dialogue and process while assessing trends in the often tense, but overlapping, areas of feminist, lgbt and queer inquiry. Special attention given to intersectional and international issues across a range of disciplines, including history, anthropology, psychoanalysis, sexology, critical theory, economics, law, cultural studies, literature, art, and film.
Note: Will count as the Graduate Proseminar for the PhD secondary field requirement in WGS. Advanced undergraduates welcome.

[*Studies of Women, Gender, and Sexuality 2010. Science, Nature, and Gender (Graduate Seminar in General Education)]
Catalog Number: 51121 Enrollment: Limited to 15.
Sarah S. Richardson
Half course (spring term). W., 2–4. EXAM GROUP: 7, 8
A survey of central texts, theories, and methods in scholarship on gender and science. Science has helped to construct and enforce cultural gender norms. Gender also valences scientific language, inflects science’s status as an authoritative social institution, and stratifies scientific communities. This seminar examines historical, philosophical, and social dimensions of science through the lens of gender. Students will pursue independent research and explore methods in interdisciplinary and feminist pedagogy. The seminar will design and develop a General Education course on these themes for undergraduates.
Note: Expected to be given in 2013–14.

Graduate Courses of Reading and Research

*Studies of Women, Gender, and Sexuality 3000. Reading and Research
Catalog Number: 17353
Alice Jardine 7457 and members of the Committee
Half course (fall term; repeated spring term). Hours to be arranged.
Note: Open only by petition. Applicants for admission should first confer with the Director of Graduate Studies.

Of Related Interest

Courses related to the studies of women, gender, and sexuality offered by other departments are listed below. Many of the courses may be taken for graduate credit. Students should also investigate offerings in other faculties in which they may cross-register, such as the Graduate School of Education, the Law School, the Medical School, and the Women’s Studies program at the Divinity School. This list is for informational purposes only and courses are not pre-approved for WGS concentration credit. For courses offered by other departments that are approved for WGS concentration credit please contact the WGS main office.

[Aesthetic and Interpretive Understanding 26 (formerly Studies of Women, Gender, and Sexuality 1133). Race, Gender, and Performance]
African and African American Studies 118. The History of African Americans From the Slave Trade to the Great Migration
African and African American Studies 120x. African American Theatre, Drama, and Performance - (New Course)
African and African American Studies 183x. Queer of Color Theory - (New Course)
Culture and Belief 22. Concepts of the Hero in Classical Greek Civilization
[Culture and Belief 41 (formerly Historical Study A-67). Gender, Islam, and Nation in the Middle East and North Africa]
Ethical Reasoning 22 (formerly Moral Reasoning 22). Justice
[*French 61a. Classicism and Modernity: An Introduction to Performance]*
French 70b. Introduction to French Literature II. 19th and 20th Centuries: Moving and Shaking
[French 157. The Hermaphroditic Imagination]
[German 149. Neurosis, Hysteria and the Schizoid - Pathologies of the Subject in Literature and Thought]
*History 81f. Women’s Voices in Medieval and Early Modern Europe*
[History 1253 (formerly Historical Study B-35). The French Revolution: Causes, Processes, and Consequences]
[History 1462. History of Sexuality in Modern West]
*History 2467hf. Everyday Life: The Textures and Politics of the Ordinary, Persistent, and Repeated: Seminar - (New Course)*
History 2805. Gender and Sexuality: Comparative Historical Studies of Islamic Middle East, North Africa, South, and East Asia: Seminar
[History of Art and Architecture 70. Introduction to Modern Art and Visual Culture, 1700–1990s]
History of Science 108. Bodies, Sexualities, and Medicine in the Medieval Middle East
[Japanese Literature 133. Gender and Japanese Art]
Portuguese 40 (formerly Portuguese 44). Images of Brazil: Contemporary Brazilian Cinema
Visual and Environmental Studies 181. Frames of Mind: Film Theory
[*Visual and Environmental Studies 182. Film Architectures: Seminar]*
Visual and Environmental Studies 184. Imagining the City: Literature, Film, and the Arts
*Visual and Environmental Studies 185x (formerly *Visual and Environmental Studies 285x). Visual Fabrics: Art, Media, Materiality Seminar*  
[Visual and Environmental Studies 196. Women’s Film and Video in France: Agnès Varda, Chantal Akerman and Claire Denis]